Inaugural Address
ON
PATHOLOGY, PAST AND PRESENT.

Delivered at the University of Edinburgh,

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(Concluded from p. 741.)

WE have thus reached the period of the foundation of this chair, and it is interesting to consider who were then the active leaders in pathological advance. The period was one of the epochs of great activity and of rapid strides in the advance of science. It was in the same year that the British Association for the Advancement of Science was founded, and amongst its earliest members were many of the leaders in medical science of the day. And it was a period of great pathological revival and creation, whether we regard the men who were foremost in the medical world, the discoveries which were made, the works which were published, or the increased foundation of chairs for teaching the subject. In France, Cruveilhier and Andral at Paris, and Lobstein at Strasburg, were the recognised leaders. Louis, who had published his great work on Phthisis in 1825, his "Anatomo-pathological Researches" in 1826, and that on "Gastro-enteritis" in 1829, was living and active, and Rayer, known by his work on "Diseases of the Skin" (1827), was preparing for his more important work on "Renal Disease," published in 1839.

In Germany there was less obvious activity; but Glüge and Fick were doubtless working at those micro-pathological problems which were brought out in 1838; Rokitansky was amassing those stores of knowledge which, ten years later (1841–1846), he gave to the world; and Johannes Müller was making those researches on the structure of tumours which were to supplement his physiological studies.

In London, too, besides the men I have named, there were others who greatly contributed to the advance of pathology. Addison had just published his first work,[1] and Hodgkin, who had begun to lecture on morbid anatomy in 1827 (published in 1836–41), had just completed a catalogue of the Museum of Guy's Hospital (1830).

In Edinburgh there were great men and great pathologists. Alison published the outlines of his Lectures on Physiology and Pathology in 1831, and the Pathology separately in 1833. Christison, who had for nine years been a professor in the University, and was already distinguished both in toxicology and pathology, had published his great work on "Poisons" (1829) two years before, and in the same year his first paper on "Dropsy in relation to Diseased Kidney," a subject in which he afterwards did such valuable work.[2] Abercrombie, Monro, and Gregory were still in active practice.

I have thus briefly traced the outward history of morbid anatomy to the time of the foundation of this chair, when it had successfully asserted its position as an essential basis of pathology. Everywhere attention was being devoted to it, and no case was considered complete in which the morbid appearances were not noted. But naked-eye morbid anatomy had its limits as an interpreter. The functions even of some important organs were but little understood, and the way in which visible changes were brought about, or how they were related to disease, could not, owing to imperfect means of research, be fully appreciated. We are apt to smile at the notion entertained by Laennec that the yellow masses in cirrhosis of the liver, from which he gave it its present name, were a morbid deposit, and the belief that the morbid "granules" described by Bright in diseased kidneys were some material whose nature could be solved by chemical analysis. But it was only by the use of the microscope, and the discoveries of physiology on the structure and functions of organs, that more enlightened views became possible. This was to be the next step in advance.

[1] On the Disorders of Females connected with Uterine Irritation, 1830.
[2] On Granular Degeneration of the Kidnies. Edinburgh, 1839.

The dawn of the new era may be traced to the beginning of the present century, and may be said to have begun with new ideas of structural anatomy preceding the fuller knowledge of function. For until the primary analysis of the structure of the body had been made, until the minuter elements had been grouped into classes, and their individual functions and powers determined, it was impossible to reduce to any general expression the derangements to which they were subject. The first step to this was the rearrangement and classification of the tissues, due partly to Haller, but mainly to the genius of Bichat, who must be regarded as the founder of general morbid anatomy, as well as of general anatomy. He not only classified the tissues and organic systems, but he entered into their pathology, and asserted that "each tissue has its own diseases." Apart from his own work in this direction, he rendered possible the subsequent advances in the study of diseases of systems and tissues, in which Laennec and Gendrin were the pioneers.

The general application of the microscope to vegetable and animal histology was the means of the next great advance. It is true that so early as the middle of the seventeenth century the microscope had been employed in histological and pathological research by Hooke, Leuwenhoeck, and Malpighi (1686), and that early in the present century many discoveries had been made in normal histology; but it is none the less true that until after 1830 it had not been possible to apply it systematically to pathological histology. Nor was it till 1847 that the work of Schleiden on "Vegetable Histology," and later of Schwann on the "Comparison of the Cellular Structure of Vegetables and Animals," laid the foundation of our modern histology. Johannes Müller was the first to systematise pathological histology as applied to tumours, and was followed by Henle, Glüge and Vogel. Nor must we omit the names of Kölliker, Bowman, Goodsir, and Sharpey, who did such good work in normal histology.

It is unquestionably to Virchow that we owe the great advance by which histology came to take a first rank as an aid to pathology, and from the date of his great work on "Cellular Pathology" (1858) we may reckon the era of modern pathology. His work, dedicated to Professor Goodsir "as one of the earliest and most acute observers of cell-life, both physiological and pathological," put a new life into pathology. Starting from the discoveries of Schleiden and Schwann on the cellular structure of vegetable and animal tissues, he showed how in the cell is the vital unit of all organised structures, how intimately its changes are associated with all the processes of organic life, both in health and disease, with the development and maintenance of the tissues, and in all their functional reactions, whether normal or abnormal. He showed, moreover, how cell changes are concerned in all morbid growths, and in a vast number of diseases, and how in cell-systems and cell-territories disease processes may often be localised. It would be impossible for me to do justice to the many side-lights which he threw upon disease. I do not think that all Virchow's most absolute dicta can be accepted at the present day, or that we can reduce all pathology to the simplicity of cell-reaction. But apart from this, and its great value as a study in histology and physiology, Virchow's work did incalculable service to pathology in sweeping away old fallacies, in compelling attention to the most minute changes which lie at the root of disease, and in showing how in these minute changes are to be sought both the evidence and the explanation of functional disorder. Nor must we overlook the great value of his cellular pathology as a system, taking the place to a large extent of the humoral, solidistic, and other pathological systems which had preceded him.

Had we lived in the days of Brown and Broussais we should better appreciate the revolution which Virchow's doctrines effected, and what solid ground was substituted for previous speculation.

What the atomic theory has been to chemistry, and the wave-theory to physics, that the cell theory has been to pathology.

And I would especially notice that it is not in any mere knowledge of cellular structure and arrangement, or in the relations of cells to development, that the value of Virchow's system consists. Nothing could have been farther from the central idea of his teaching than the mere mechanical application of cellular structure to the elucidation of the phenomena of life and of disease. It is the living cell, endowed with vitality and with function, governed by laws of existence, capable of self-multiplication and propagation, and arranged in organic systems, which he studies. It is the

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cell as the living active agent in the production of disease, and the arrest or perversion of its action by disease-producing causes, which have the highest place in his thoughts. It is by this link that the study of histology is connected with pathology, and that in turn this is joined to evolution and development—the link by which all other biological studies come to have an intimate bearing on pathology. However far we may transcend cellular pathology, we cannot neglect it in any future study.

We have thus reached a point at which the era of modern pathology may be said to begin. In the first thirty years of the century we have the awakening, the new impulse to the study of morbid anatomy, both in its relations to normal anatomy and to clinical medicine, and side by side with this, though as yet separate, the renewed study of general anatomy. In the next thirty years we have the more general application of morbid anatomy to clinical medicine as an expounder of the phenomena of disease, and at the same time the fuller knowledge of structure and function of the several organs, and the working out of detailed normal and pathological histology rendered possible by the improvement of the microscope. We may reckon the end of the thirty years, 1860, when Virchow's work had had time to be known, as the culminating point of this period, and the entrance of our present epoch.

During the twenty years which have passed since Virchow's great work pathology has made immense progress. Morbid anatomy has discovered lesions and diseases before unknown, and has connected them with the symptoms and functional derangements with which they are associated. New processes of diseases have been discovered, and old ones explained. Such discoveries as those of Cohnheim on inflammation, and the work done on the subject of microscopic parasites, have revolutionised whole fields of pathology. Our knowledge of minute structural changes has become encyclopædic. Look which way we will, the array of facts and discoveries seems almost overwhelming, and every day new ones are added to the store.

But, gentlemen, this is not the time for me to speak to you in detail of modern pathology. This it will be my duty to unfold to you in due course. I would rather try to impress upon you the spirit in which the subject of pathology is to be approached, and how it stands related to your past and future studies.

Going back to the standpoint that pathology is the investigation of deranged *life*, of abnormal *living* processes, it will be obvious to you that morbid anatomy alone, even combined with histology and chemistry, cannot be our guide beyond a certain point; that knowledge limited to structure cannot serve to show us fully how function and living action are affected. In some cases, indeed, our present morbid anatomy fails us entirely, as in the case of epilepsy or of typhus fever; though we hope with better methods to discover their organic cause. But even in the simplest cases, where our induction seems to be a direct one from anatomical changes, we find that we are, in reality, presupposing a knowledge of function. Take, for example, the simple case of impaction of a calculus in the ureter. By simple mechanical pressure of the pent-up urine the pelvis and calyces dilate, the kidney substance gives way and gradually atrophies, and at last remains as a sort of shell of tissue, which for all intents and purposes of kidney function is effete. Surely, you will say, morbid anatomy shows us all this at a glance. But you have assumed a knowledge of the function of the kidney in secreting urine, and the possibility of its partially continuing its functions for a time, even when the outflow of urine is checked. And if you go more deeply, and inquire what are the subsequent intimate changes in the structure of the organ, and what the effects upon the system, you will find that you are involved in a multitude of complicated pathological problems. And if you would trace back the disease to its source, you must determine what constitutional causes led to the formation of the calculus, by what physical or chemical processes it came to be formed, and why and how it found its present lodgment.

Thus it is that to make morbid anatomy and histology worthy of the name of *pathological* anatomy we require the knowledge of function and its mechanism. We must know where and how altered structure is connected with perverted function—whether as cause or effect; and this we owe to physiology and to comparative and experimental pathology.

There has been too great a tendency to overlook this vital fact, and to regard the investigation of structure as the be-all and end-all of pathology. It has unfortunately by many been thought enough that we should know the naked-eye and microscopic appearances of diseased organs, without any intelligent idea of how they are brought about, or in what relation they stand to the phenomena of disease. We have sought rather to find in structure the characteristics of disease, than to make it a guide to the understanding of disease. We have been passing through what we may call the slough of histology. For example, the tubercle corpuscle of Lebert, the cancer cell, the giant cell, the micrococyte, all have had their day as absolute criteria of particular diseases. But I will go further, and say that in a great part of our microscopical work on diseased organs we have been too apt merely to observe visible changes, without paying attention to the more important processes which underlie them. Yet surely this should not be. We must and ought to study structure and chemical composition as thoroughly and deeply as possible, by all the means in our power, but we must not rest there. It is the great merit of Virchow's great work, that, passing by the mere study of structure for structure's sake, he sought to show how the morbid change had been developed, what was its bearing upon living action, and in what way it stood related to normal processes of evolution, growth, and function.

I have said that in great measure we owe this further connecting link between morbid anatomy and pathology to physiology, comparative pathology, and experimental pathology.

Physiology is the first great guide. Normal development and normal life in all its departments have their imitations in abnormal growth and abnormal life, whether excessive, perverted, or deficient. Transfer some morbid growths to the embryo, and what is disease becomes healthy development. Magnify and transfer the normal secretion of milk, and you shall have, under different conditions, a fatty degeneration. Even inflammation—that great bone of contention—seems to be ranging itself by degrees as a greatly exaggerated physiological process. Indeed, it is by our knowledge of the normal structure, composition, and function of every minutest part that we gain our knowledge of what is disease, and in part of how it is brought about.

Hence it is that every physiological discovery, however minute, becomes of vital importance for the advance of pathology. Many discoveries, which seem of small importance in their physiological aspects, become of great value in the field of pathology.

Pathology, in its turn, enlightens and advances physiology. The subtle processes of disease often reveal normal structure far more fully than the most skilful manipulations of the histologist upon healthy tissues, and follow out the track of dissections which no scalpel could trace. Waxy degeneration of the liver, and the course of secondary degenerations in the spinal cord, afford striking examples. So, too, the reactions of disease, aided by simple microchemical reagents, serve to distinguish varieties of chemical composition too minute for analysis. Pathology, too, often corrects physiological theory as regards function. It has been well said that the value of an hypothesis consists, not in explaining the instances which have preceded it, but in standing the test of subsequent instances. Pathological observation has thus often served to demolish hypotheses which had stood the test of instances specially designed to try their strength.

If I were asked what is the present standpoint of pathology, I should unhesitatingly say that it is the physiological, or, if you will, the biological standpoint. In other words, pathology is governed by no theory, and limited by no methods, other than those which equally govern and limit physiology. If a cellular physiology could suffice to explain all the phenomena of healthy life, a cellular pathology might equally serve for disease life. And whatever method or instrument of research is requisite for the full investigation of the phenomena of healthy life in all its manifestations, is equally or still more requisite for studying the phenomena of disease life.

It is from this point of view that the study of clinical medicine and pathological experiment are, in my opinion, the inseparable adjuncts of pathological study. That would be a strange physiology which should conduct its study on dead animals alone, and no less strange a pathology studied only on dead subjects.

The history and course of each particular case, the hereditary antecedents, the physiognomy and conformation, the symptoms and their order and mode of death production or

recovery, are so many phenomena of disease life which we must minutely study in order truly to understand the pathology of each particular case, and rightly to connect structure with function. If we could, after opening the body case, set the body machine going again like a watch, and observe how the wheels interlock, or where the obstruction is, or, separating one part, set that in action, and so piece by piece discover where and how its stoppage came about, we might rest content with morbid anatomy. But the human machine, once run down or stopped, can only be set in action again by the hand of the Creator. We can and must imitate the action by study upon inferior machines, but, precious as such results are, they will not and cannot fulfil all the conditions of the diseased human body.

I have shown how physiology and pathology must go hand in hand, and that the discoveries of physiology are essential to pathology, and this leads me to say a word on the subject of experiments on animals, both physiological and pathological. No one who knows anything of the history of physiology can for a moment question that it is by this means that a large part of our most important knowledge has been gained, and could have been gained in no other way. And no one can study or teach pathology without constantly referring to and making use of the knowledge thus gained. He is worse than a coward who, knowing this, and making use of his knowledge, would claim for himself, whether directly or by implication, any higher moral ground, because he is not personally engaged in such investigations.

We cannot, if we would, do without the knowledge acquired for us in this way by physiologists. If we could pull out all that has been built upon this knowledge, our fabric of pathological science would totter and fall, just as would the whole of modern medical science if it could eliminate all that physiologists and surgeons and pharmacologists have gained for the benefit of humanity by experiments on animals.

But pathological experiment has its own proper work. In this country, for the time, it is so seriously hampered that research by its means has become almost impossible. Science does not walk easily in fetters, even if adjusted with the sanction and co-operation of its votaries. It has indeed been objected that we cannot induce in animals the natural processes of disease, and that the results of experiments on animals are fallacious when applied to man. In a certain sense this is true, for, of course, as in all other experiments, we require the use of judgment and discretion. But the statement is very largely grounded on a sort of belief that as man is mentally so far superior to the lower animals he must likewise be widely removed from them in general organisation and structure.

It is by the study of comparative pathology that we have come to learn how intimately the processes of disease in the lower animals may resemble those in man, and it is by experiments upon the diseases which they have in common with man that we have come to appreciate those differences in constitution and in reaction, to disease which enable us in a great measure to control the results of experiments.

Comparative pathology, that is, the study of the diseases of the several classes of animals, and the study of the same disease in its reactions upon different classes of animals, is to a very large extent a growth of late years. Just as I have remarked that the growth of human morbid anatomy followed in the wake of the progress of normal anatomy, so has the study of comparative pathology followed the development of comparative anatomy, comparative physiology, and comparative embryology.

It is true that a study of diseases of animals has been to some extent conjoined with the study of comparative anatomy and physiology, and that Harvey, Hunter, and Jenner were well aware of the valuable information to be derived from a comparison of human with animal pathology. It was well known that some of the lower animals were subject to certain morbid growths and parasites analogous to those which afflict man, such as warts, cancers, and hydatids, and that some animal diseases, such as hydrophobia, could be communicated by inoculation to man; and long before Edward Jenner discovered that cow-pox could be transferred to man, it was suspected that small-pox was primarily an animal disease.

But we have only recently come to understand the full bearing of those endemics and pestilences which have in all ages desolated the animal world, and to see that we stand on common ground with the brute creation in being subject to the same or to analogous plagues, and that by the study of these, under their simpler conditions, we may hope to throw light upon the forms affecting man. It is in this branch of comparative pathology—that relating to infectious and contagious diseases—that we see best the value and importance of experimental pathology, in the direct benefits which it confers on the whole brute creation, as well as upon man, and it is in this field that have been gained some of the most remarkable triumphs of modern pathology, which bid fair to revolutionise the science and treatment of infectious disease.

Gentlemen, I have no idea of giving you now any description, however summary, of the past and present state of what has recently been called "bacterial pathology." But as it is to myself a subject of intense interest, and one upon which attention and expectation are now largely centred, I may venture in a few words to indicate its importance to you as a subject of study, and to point out its bearings on the pathology of the future.

We find the germs of the discoveries on this subject in three different sets of observations. Common observation on epidemic and malarial diseases had brought the conviction that the *materies morbi*, the contagium or seed of these diseases, must be something infinitely small, light, and portable, capable of floating in the air, of remaining long dormant, and, on finding a suitable soil in the human body, of producing a certain definite series of symptoms, occurring often with great regularity in the time of appearance and order of development. In the case of some of these diseases, the virus, whatever its nature, was not exhausted in the body, but multiplied ten-thousandfold, and, as in the case of small-pox, one might inoculate a certain definite minute quantity and produce a local disease which, by contagion[3] to other healthy persons, might cause hundreds of cases, in each of which the poison was reproduced. Clearly, then, it was also capable of indefinite self-multiplication under suitable conditions, and must be something more than a mere chemical poison.

This, then, was the starting-point of the germ theory as applied both to zymotic diseases, such as measles and scarlet fever, and to certain wound infections, such as erysipelas. But microscopic research failed to detect these germs, and though the theory was discussed and maintained, it could not yet assume a definite scientific form.

Then came the great discoveries of Pasteur[4] on fermentation, and the recognition of bacteria as the accompaniments and apparent agents of putrefaction. The idea that each infectious disease might be a sort of fermentation produced by a fungus, now grew into a more definite shape, and the germ theory received expansion upon this basis. You may some day read the history of the many germs and fungi which were discovered and lost again, and I will not detain you with the many marvels which were seen, or believed to be seen, under the microscope. But all the time the true was being worked out with the false, though the erroneous observations of some, and their contradiction by others, have tended to make many scientific men disbelieve both true and false.

The first accurate light upon the question came in the investigations upon anthrax or splenic fever, and, out of the multitude of results of research on this and other contagious diseases, I shall venture to select by way of illustration one in which I am specially interested. In 1850 the presence of a minute foreign organism of a rod shape in the blood of animals dying of this disease was discovered by Rayer[5] and Davaine. Davaine gave to these bodies, which he showed to be of vegetable nature, the name of *bacteridia*,[6] to distinguish them from *bacterium termo*, which they resembled except in being devoid of movement. Then came the discovery that they could be cultivated artificially in fluids outside the body, and the demonstration by Koch that they formed seed spores which could remain a long time dormant, but under suitable conditions grow and multiply. With this also came the perfecting of the proof, afforded mainly by experiment with the artificially grown fungus, that the fungus or bacillus was the essential virus of the disease.

Here, then, was one instance—but a solitary one—in

[3] This, I need hardly say, was the reason why inoculation of small-pox was made penal.

[4] Published 1857 to 1861.

[5] The discovery is usually attributed to Pollender, but his independent discovery was not made till 1855.

[6] The name Bacillus anthracis given by Cohn the botanist is that by which this organism is now usually known.

which a disease having many characters of a contagious disease was proved to be due to a fungus, which, when inoculated, gave rise to the disease, and was reproduced in the blood. But long before this proof had become complete the researches of Klebs, Panum, Bergmann, Sanderson, and many others, had shown that the bacteria of decomposition were apparently the active agents in what we know as blood-poisonings following wounds, and that similar organisms were to be found in some of the allied diseases, such as diphtheria and erysipelas. Now, so far as we are acquainted with the history of these diseases, they have this sharp distinction from the zymotic diseases, that they do not give any protection from a future attack, and that they are essentially allied to putrefaction, both in their causes and phenomena. The admirable scientific and practical experiments which Lister worked out when a professor in this university, and the investigations of Koch on wound infections, have established with certainty the fact that these blood-poisonings are effected through the agency of bacteria. Might it not then be that splenic fever was merely one of these common blood-poisonings, and that its study could throw no light on the zymotic diseases? In animals it appeared to be communicable by ordinary ways of infection or contagion, but to man only by inoculation, and it was seriously questioned whether even in the lower animals it could be produced except by inoculation.

The question was in this state until about three years ago, when it was discovered by Dr. Sanderson and Mr. Duguid that a cow might be inoculated with splenic fever from a guinea-pig, and, though suffering severely, not die of the disease. In continuing these experiments, I found that a cow once so inoculated resisted the results of further inoculation to a very remarkable degree, in other words, that practically it could thus be rendered insusceptible to future attack of the disease. This fact at once showed that splenic fever followed the same rule with regard to protection as the ordinary zymotic diseases, and did away with one of the barriers to the acceptance of the bacterial germ theory.

In making a series of experiments with a view of obtaining, in a suitable form for inoculation, this virus modified by transmission through the guinea-pig, I found that if one cultivated the bacillus under particular conditions it gradually lost its activity, and at last became practically inert. It at once occurred to me that, by making use of this fact, I might obtain a virus so far modified as to be sufficient when inoculated to ensure protection, and yet not to endanger the life or safety of the animal inoculated. And this I found could be done with success.[7]

M. Pasteur has recently published the results of a very large series of experiments made by a precisely similar method, and with results fully confirming those which I published more than a year ago. And, although I venture to claim for England whatever merit may be due to priority of the discovery, I none the less rejoice that the facts should have been so fully established in France. My experiments were made with a small and inadequate sum of money furnished by the generosity of a private society, and in the face of all the difficulties interposed by law; whilst M. Pasteur is encouraged and abundantly supplied with means by the liberality of the French Government.

But I must not now dwell upon the many points of interest opened up by recent discoveries on bacterial contagion. What I wish to emphasise is the immense field of research which is opened by these discoveries, and the hopeful anticipation of the possible prevention and remedy of a multitude of the most deadly scourges of our race. And all this, indeed all the certain progress in this field of research, which, bear in mind, promises as much for the animal world as for man, has been the outcome of experiment on animals. Every step in these inquiries is necessarily made by inoculation of living animals, and every result must be checked by the same means. If experiments on animals were stopped, or even if, in other countries, they were subjected to the same restrictions as in England, I can honestly say, speaking from experience, that I believe these inquiries, which may save hundreds of thousands of lives of both cattle and men, would be practically arrested, or would at least take many years for their development. And it is not only in this more direct manner that such discoveries are of interest, for they promise, I need hardly tell you, to throw great light upon the whole question of contagion. Much has yet to be learnt, much to be made certain, many conflicting testimonies to be reconciled, before we can fully accept the bacterial hypothesis of zymotic infection; but we may yet look hopefully forward to its establishment.

I have thus briefly referred to some of the main branches of pathological investigation; and I have incidentally referred to the relations of physiology to pathology. But there is one subject which must not pass unnoticed—viz., What is the relation of pathology to therapeutics? I think it is true to say that it is by the intimate study of pathology that we must hope for advance in the scientific application of remedies. Up to the present time pharmacology is mainly chemical and physiological, whilst treatment is mainly empirical; in other words, most of our acquaintance with the mode of action of drugs is based on experiment on healthy animals, whilst most of our actual use of them in disease is based on experience or on theory. That there are notable instances in which knowledge of physiological action has led to correct application in disease everyone knows; such, for example, as the use of nitrite of amyl, of digitalis, of jaborandi, and of salicylic acid. But these triumphs have been based either on a knowledge of the intimate nature of the morbid process or on a happy combination of knowledge of physiological action, with a speculation on the pathology of the disease, which turned out to be correct. In the latter case the experiment has solved the pathology of the disease as well as its remedy, just as we may open a box and solve the structure of its lock by trying, out of a number of keys, one which we think looks about the right size and shape.

But how shall we hope for scientific advance in therapeutics? Pathological experiment is exceptionally possible—the pharmacologist does his best in discovering all he can of the physiological properties of drugs; the therapeutist exerts his knowledge, ingenuity, and experience in practical application, but he who can say, here lies the centre and source of the disease, and this is its precise mode of development and the way in which function is affected; this is the point which you must touch, and in such a way must you touch it—it is only he who can say this who bridges the gulf which separates empirical from rational therapeutics.

And, lastly, I come to inquire what is the present position of pathology in relation to medical education and practice?

I have shown that the separation of pathology from physiology became essential, partly in consequence of the growth of both subjects and partly from a divergence of their methods. The "Institutes of Medicine" arrived at a practical exclusion of pathology and therapeutics by the mere force of growth of its primary subject, physiology, and the requirements of its teaching. But other causes were at work. So long as pathology was regarded as a subject to be studied mainly on the basis of physiology, normal and experimental, aided by instances drawn from bedside experience and speculations upon them, so long only could they conveniently be studied together. But with the growth of the study of morbid anatomy and histology as the basis of rational pathology, showing as they did conditions inexplicably by, and unknown to, any physiological law, a temporary separation became inevitable, and pathology, following its own path through the deadhouse and laboratory, has but recently emerged upon the same open plain to which the more direct path of physiology had already led, and the two again walk side by side, mutually supporting and assisting each other, and in their turn aided by and aiding all the other branches of biology.

In a somewhat similar way the teaching of pathology has become separated from that of systematic medicine. Not that it can be or should be excluded from it, but that its complete study requires a more extensive treatment. In most cases the study of pathological anatomy was the first to receive special separate attention, and it is still so in many foreign and most English schools. In proportion to the increased attention to morbid anatomy as a subject worthy of special scientific study, apart from its obvious utility as a corrective to diagnosis and a guide to the course of individual cases, so did the difficulty of fully treating it in lectures on the symptoms and history of special diseases increase. Morbid anatomy in its turn threw light upon medicine, and by its means diseases formerly regarded as identical came to be separated, and their symptoms and course had to be discussed in greater detail and with increased care, and so the possibility of considering even all common diseases in one course of lectures became much

[7] Journal of the Royal Agricultural Society, vol. xvi. part i., April 1880, and vol. xvii. part i.; Proc. Roy. Soc., June 17th, 1880; THE LANCET, Dec. 18th, 1880, and Jar. 1st, 1881; British Medical Journal, Dec. and Jan. 1880-81.

diminished. The special training and methods of study increased the need of separation, and the development of pathological histology has made the necessity for division still more absolute.

In many English schools the subject of general pathology is not specially treated, but retains its place as a part of systematic medicine and surgery. The separation and union with other branches of pathology are, I believe, more scientific and more beneficial. That this is so I make bold to maintain on these grounds:—First, that what we understand by general pathology is very largely based upon the study of pathological anatomy in its widest sense. Some have gone so far as to make the term general pathology almost synonymous with general pathological anatomy—an undoubted error. But, beyond question, the foundation of pathology must be largely laid in pathological anatomy, from which, moreover, it draws many of its illustrations.

In its study, too, general pathology has methods which are widely different from those of systematic medicine and surgery. It aims at the establishment of general as distinguished from special laws; it studies processes underlying widely divergent maladies; it seeks its proofs in all regions of life, whether in human physiology, in experimental and comparative pathology, in the processes of growth and degeneration in plants, and in the rare and costly experiments by which nature sometimes solves pathological problems at the expense of human suffering and life.

And, if I may add a practical and utilitarian reason, a separate course of general pathology saves the double teaching of its subjects in special medicine and surgery. General pathology, like actual life, knows no distinction into the corresponding external and internal pathology. Its illustrations are equally drawn from both, and it teaches the changes and processes which are common to the whole system and to its several structures. Hypertrophy and atrophy, degeneration and repair, inflammation and morbid growths, know no separation into external and internal. General pathology is thus the common meeting-ground of medicine and surgery, uniting the isolated discoveries of each into one harmonious whole. And it does more, for, introducing those arguments and discoveries afforded by general biology and by comparative pathology, it elucidates that which could not be explained by study on man alone.

Of the importance of morbid anatomy as a branch of medical education I need not say more than I have already said. The history of pathology, and the immediate benefits to be gained from its study, as well as the requirements of examining bodies, have made it one of the ordinary branches of medical education. But whilst in England gross naked-eye morbid anatomy has been well worked at, especially in relation to clinical medicine and surgery, we have somewhat fallen behind in pathological histology and pathological chemistry. Perhaps the notion that we excel in clinical discovery, fostered by the great results attained by Bright, Addison, W. Jenner, Hughes Bennett, Murchison, Wilks, and many others, has led to some disregard of those improved methods of research afforded to us by science. And it must be added that these means have but recently arrived at such perfection as to enable teaching to be carried on with facility on a large scale. But certain it is that both in France and Germany the general knowledge of microscopic pathology has hitherto been far in advance, and the teaching much more thorough, than in England. That this has been so is not to be attributed to any want of encouragement by example of the great discoverers of former or recent times. Going over the names of those in England who have been eminent as clinical surgeons and physicians of late years I find very few who have not in their earlier and less occupied years been largely addicted to microscopic pathology, unless engaged in some other more special branch of scientific investigation of disease. Jenner, Paget, Bowman, Gull, Lister, Wilks, Hutchinson, Bristowe, Quain, Hughes Bennett, Sanders, Grainger Stewart, and a host of others, might be adduced as instances. These men, following the example of Bright and others, have used the best and most recent means to study thoroughly and record completely all the phenomena of disease falling under their observation, and have proved in the warfare of practice that disease may be overcome by science better than by rude assault.

Nor has it been due to any want of enthusiasm on the part of students or of the younger generation of medical men, as is abundantly proved by the work done for pathological societies, and by the large number who for this very purpose have sought foreign schools to complete their studies. It is, I believe, entirely due to the neglect of teaching and examining bodies. This University, which is unique in having a Professorship of Pathology, also stands, I believe, almost, if not quite, alone in requiring any special examination in pathology, including morbid histology, for a medical degree. And this fact has reacted upon the teaching, which, in many schools, has been allowed to remain incomplete and inefficient. Attendance upon lectures on pathological anatomy is now required by many examining bodies, but I say with some confidence that, with one or two exceptions, there has scarcely existed, if there does now exist, in the London Medical Schools any course in which pathological histology is systematically taught so as to comprehend a practical study of the principal changes in all the important organs.

I speak thus distinctly upon the subject, because I am convinced of its importance, and desire to draw attention to it. It is to the honour of this University that pathology occupies so important a place in its curriculum.

We have thus glanced at the condition of teaching in relation to general pathology, morbid anatomy, and histology. There is, however, one subject upon which I must say a word—viz., pathological chemistry.

Much has been expected of pathological chemistry, yet hitherto it has made but small advances. It was expected that mere ultimate analysis would solve many pathological problems. When Bright gave the account of granular disease of the kidneys, it was thought that chemical analysis would decide what was the nature of the morbid granules, and thus settle the pathology of the disease. So too, at a later period, it was thought that the discovery of some particular chemical product was distinctive of a particular disease—e.g., leucine and tyrosine in the urine as pathognomonic of acute yellow atrophy of the liver. Pathological chemistry has thus passed through the same phases of faith as pathological histology. It is becoming gradually recognised that pathological chemistry must stand on similar ground with morbid histology in its relation to physiology, that it must be by comparison with the normal chemical processes and chemical reactions in the body that the chemistry of disease must be investigated, rather than by means of ultimate analysis or of discovery of organic compounds peculiar to disease. Both of the latter have, of course, their own proper value.

Pathological chemistry thus waits for the advance of physiological chemistry, and the great difficulty and complexity of this subject make advance necessarily slow.

But perhaps you will ask what influence the study of pathology has upon the actual practice of surgery and medicine.

Not uncommonly it is alleged that the special study of pathology is a waste of time, nay, positively injurious to the development of acquaintance with practical work. There is, in truth, a limit of time and energy both to students and practitioners, and in the case of both time and energy may be ill-apportioned for the practical object in view—the treatment of disease—especially when so many subjects must be crowded in so short a time.

But the rare facilities offered for the study of pathology during the student career, and the far greater difficulty in acquiring opportunites in after-life than is the case with many other subjects, render its thorough study at this time especially important, if it is worth studying at all.

No one, I suppose, questions the importance of carrying the studies of the bedside in fatal cases to the test of the post-mortem room, or the advantage of gaining that acquaintance with the different appearances presented by diseased organs which will enable them to be recognised in after-life. These, and the supposed power of stating at a glance whether a microscopic scraping of a tumour is malignant or non-malignant, have been gravely asserted to me by a hospital surgeon as being "all that a student wants to know of pathology."

If there were no science of pathological anatomy, if all its multitudinous incidents were connected by no general laws, if there were no intimate connexion between symptoms and structure, and no possibility of tracing the processes of disease and connecting them with the changes in the organs, we might perhaps allow this. And if it were possible without any practical demonstration to teach what we know of the alterations of minute structure in disease, their origin and course, and the way in which these affect function, the study of pathological histology by students might be to a large extent given up. But since we have eyes to see and

hands to work, and the microscope enables us to apply both to the ready investigation and recognition of these processes, we prefer the practical method of study, as both easier and more effective, as well as more interesting, and of daily increasing value in after-life.

And will not that man who is acquainted with what has hitherto been learnt of the causes and processes of disease in its more widely distributed forms, of the laws which condition its occurrence, and the general course which it takes, be far more likely to take a rational view of the symptoms, and of the effect of remedies? Will he not see in each case, however trivial, the application of general laws, and, conversely, will he not often be able in some exceptional occurrence, to extend those laws by fresh observation?

Thus, knowing the gross forms and results of disease, intimately acquainted with the conditions which give rise to them, the interactions of the several organs, the changes of minute structure which lead to impairment of function, guided by general pathology, his views corrected and enlarged by knowledge of the results of experimental and comparative pathology, the surgeon or physician will, in his every-day round of work, take rank as a scientific observer; no case, no symptom, will be trivial to him; each unimportant though it may appear in itself, will serve as a guide to some more general or deeper seated cause, and whilst he will be delivered from the tedium of routine, he will also be saved from its dangers.

Gentlemen, I have endeavoured to trace out to you something of the history of the chair during the fifty years of its existence, and to show you in brief outline how the subject of pathology has come to assume its present condition as a great and all-important branch of medical science. I have endeavoured to impress upon you the fact that it has intimate relations with all the other branches of your medical studies, between which, indeed, it forms the connecting link. The exact studies of anatomy, physiology, chemistry, and biology have prepared you to enter upon this study, and, in proportion to the extent and practical accuracy of your knowledge of these subjects will be the possibility of your advance in pathology. I have given you some faint idea of the importance of this study in its bearings on your future work, when you will have to do with the immediate study and treatment of disease.

Enter then upon your work with the conviction that what you now learn is to form the groundwork of a study which will last you a lifetime, and lay the foundations as deeply and broadly as possible. Make it your object to advance the science of pathology by diligent and careful observation, in which everyone may assist, and avoid as far as you may all barren theoretical discussions.

If, in what I have said, I have in any way awakened an interest and quickened your curiosity by what may now seem in a measure obscure, no effort on my part shall be wanting to make clear to you, step by step, the science of pathology in all its branches.

Carry with you into your work, whether at the bedside, in the post-mortem room, the laboratory, or the lecture theatre, the belief that pathology is a living, not a dead study; let this belief make the routine of its drier bones instinct with life and action, and you shall find that the reality of its interest and its value immeasurably transcend what I have endeavoured faintly to depict.

THE TREATMENT OF EMPYEMA.[1]

By W. B. CHEADLE, M.D., F.R.C.P.,
PHYSICIAN TO THE HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET; SENIOR PHYSICIAN TO OUT-PATIENTS, ST. MARY'S HOSPITAL.

THE diagnosis and treatment of empyema are of the first importance both from the comparative frequency of the affection, especially amongst children, and its serious character. It seemed to me, therefore, that I might with advantage review the results of my work in this respect for the past few years, during which I have enjoyed better opportunities than common for observing the disease, and directing its treatment in the wards of the Children's Hospital and elsewhere. On the question of diagnosis I do not propose to touch in the present paper, but shall concern myself chiefly with a scrutiny of the main causes which appear, from my records, to govern success, and the influences which may be discernible as tending to failure and death. Many, indeed, of these factors are beyond our direct and absolute control. Such are the constitutional power of the patient, the original limitation of the empyema by bands of adhesion or its spontaneous evacuation through the lungs, or, on the other hand, its dependence upon a tuberculous or a malignant disease, or pyæmia. But in empyema, as in many other diseases, apart from the rigid laws which in certain cases guide inexorably to good or ill result, there remain a great majority in which medical art has, so to speak, comparatively free play, and the eventual result, the issue whether the patient shall recover or shall die, depends very largely upon the influences which we bring to bear. In no disease, I am convinced, is this more true than in empyema; and the power of influencing for good, the knowledge how to avoid influencing for evil, increases almost from day to day as fresh light is afforded by advances in physiology and pathology. There is also, I find, a constant and increasing danger of falling into a stereotyped and routine practice in the treatment of familiar diseases, and on this ground also a re-examination of the position from time to time is of essential value.

I have no intention of going into elaborate statistics, partly because they are always wearisome and often puzzling in the rapid exposition of oral communication, and partly because the numbers with which I have to deal are too small to safely admit of any wide generalisations being deduced from them. I shall, therefore, content myself with pointing out one or two interesting results which came out of them before proceeding to discuss more minutely their bearing upon the main subject of this paper.

The treatment of empyema.—The total number of cases which have come under my care amounts to thirty-four; all, with one exception, children under twelve years of age. The youngest nine months only, the eldest ten years. In every case but three paracentesis was performed. In one of these excepted cases spontaneous evacuation took place through the lung, in the second the empyema was secondary to acute pyæmia and in itself comparatively unimportant, while in the third repeated explorations failed to find the pus-containing cavity. Of these 34 cases 21 recovered, 13 died, giving a mortality of 38·2 per cent., or 1 in 2⅝.

In order, however, to present a fair estimate of what may be called the true mortality of simple empyema, certain of these cases must be excluded, and, first, cases which had practically recovered when carried off by fresh disease in no way connected with empyema. Thus no less than 4 cases which had been safely steered through all dangers to convalescence were smitten either with scarlatina or a malignant form of measles, which prevailed at the time, one with each in succession. Of these 3 died, *killed by the epidemic*, the fourth barely escaping to make a perfect recovery in the end. Further, three cases in which the empyema was a mere complication and secondary to some other fatal disorder—viz, pyæmia, gangrene of the lung, and multiple hepatic abscesses, ought to be eliminated. With these corrections we have 21 recoveries and 7 deaths, or a death-rate of 25 per cent., or 1 in 4. If, still further, the 3 cases of recovery carried off by intercurrent epidemics be classed as recoveries instead of deaths, it gives 24 recoveries to 7 deaths, or 22·2 per cent., or a loss of 1 in 4½. As compared with the results given by others Dr. West had a hospital mortality of 48·1 per cent., or, eliminating cases carried off by intercurrent disease, 41·1 per cent., while of 6 cases in private all recovered, making an average mortality of 35·8 per cent. Steffen's table of 59 cases, quoted by Dr. West, gives 1 in 4, or 25 per cent. Dr. Wilson Fox gives tables showing Bowdich's average to be 40 per cent., and a general table yielding 33 per cent., or of uncomplicated cases 25 per cent. On the whole, therefore, these statistics compare not unfavourably with previous estimates. But on this I wish to lay no undue stress.

If we turn now to the cases of recovery, and examine them, the first feature which strikes one forcibly is the curious fact that although empyema occurs on the right and left side in proportions almost exactly equal (16 right to 17 left) the proportion of recoveries is in the ratio of 7 right only to 15 left—that is, although there are as many empyemas of one side as the other, more than twice as many of the left recover as of the right. One would certainly have inferred that a left empyema, by causing greater embarrassment to the heart and arterial circulation, would be more fatal than

[1] Read before the Harveian Society, April 7th, 1881.

one of the right side. I do not know whether any other observations on this point have been made; but as it stands the result is curious and noteworthy, and at first sight not easy of explanation.

The next fact which comes out of the analysis is that 9 cases were cured by aspiration alone, without a permanent or free opening. It is to be noted that, with one exception, these were all examples of small limited empyemata, the amount varying between 2 drachms and 8 ounces. Of this series, cured by aspiration only, 3 were operated upon only once, 3 twice, 2 four times, and 1 five times. It is to be noted further that when the amount of fluid was large it was, as a rule, found necessary to resort to a free opening and constant drainage. The average age of the patients who recovered was 4 years 2¼ months—as compared with an average of 3 years 8¾ months in the fatal cases—a result entirely in agreement with previous experience. The youngest child amongst the 21 who survived was 1 year 4 months, whereas amongst the 10 who died 3 were aged 16, 10, and 9 months respectively. The duration of the disease before coming under treatment has, unquestionably, a material influence upon the ultimate issue; but the average yielded by these cases gives the anomalous result that whereas in the cases of recovery the disease had a previous duration of 66·9 days, in the fatal cases the duration was only 58·9. In this instance, however, it is clear that the statistics are too small, and vitiated by the presence of 2 cases having a doubtful history of exceptional previous duration—viz., 18 and 15 months respectively. Apart from these the balance of shortness of previous duration is, as we might expect, largely in favour of the recoveries.

It is the fatal cases, however, which throw most light upon the dangers which beset empyema, warn us most imperiously of faults in management, and indicate most clearly the lines upon which improvement is to be sought and increased success fairly hoped for. The first salient feature which arrests attention in the list of fatal cases is that in nearly every instance the amount of pleuritic fluid was large. In the 7 cases of fatal simple empyema there was only one which could be classed as a small localised empyema. Cases, then, of copious purulent effusion are more fatal than those in which the quantity is small and localised by adhesions.

Perhaps the most striking fact which comes out of this analysis of fatal cases is the immediate cause of death, or, at any rate, the occasional occurrence of a serious morbid condition of special character associated with the fatal ending. In every instance there was inflammation of some serous membrane, and in two cases pneumonia in addition. The record stands thus: meningitis 2 cases, pericarditis 2 cases, peritonitis and pneumonia 2 cases, pleurisy and pneumonia of the opposite side 1 case. Now, this constant occurrence of inflammation of some serous membrane as the immediate cause of death, or accompanying it in all these fatal cases of empyema, is, to my mind, a very significant fact. It suggests at once the possibility of septic poisoning. The patients did not die gradually, worn out by hectic or of amyloid disease, as the result of prolonged suppuration. They were cut off with comparative suddenness, before the end would come in the gradual decline of disease moving to a close in its normal symmetry.

The inflammations, again, seem to have something special about them in their seat and character. Take, first, the cases of meningitis. In both the cerebral hemispheres were covered with a thick layer of greenish lymph, extending over the cerebellum, into the Sylvian fissures, and enveloping the structures at the base. There was no sign of tubercle. The meningitis was of the simple kind, with abundant plastic or purulent exudation. Now, meningitis of this form is one of the rarest of diseases except as a result of mechanical injury, or disease of the cranial bones, and especially disease of the internal ear; but no mechanical injury could be discovered, and no affection of bone. The internal ears were examined and found healthy. One of the children had indeed fallen out of bed a few days before, and was violently sick afterwards, but no bruise was visible at the time, no injury found on post-mortem examination afterwards. It deserves to be mentioned, too, that in one of these cases ending in meningitis the empyema followed scarlatina three months before, and in the second there had been previous nephritis, possibly scarlatinal; so that it might be suggested that the meningitis was secondary to renal disease. Against this are the facts that in the first case the urine was normal throughout, and that there was no sign of present and no history of past nephritis; in the second all signs of nephritis and all trace of albumen had disappeared more than three weeks before.

Further, as far as my knowledge extends, meningitis is hardly known as a complication of Bright's disease; while, on the other hand, it has an acknowledged dependence upon the pyæmic or septic condition. Similarly with regard to the cases of pericarditis, pleurisy, and peritonitis. These could not be looked upon as due to extension of the inflammatory process, for the acute stage had long passed by. Moreover, in the cases of pericarditis and pleurisy the fresh inflammation was on the opposite side of the chest to the seat of empyema. There was, therefore, in none extension by continuity.

To the evidence afforded by the fatal cases upon the point under consideration must be added that of one case of recovery (B——). On the sixth day, after a free opening had been made, there developed a sharp attack of peritonitis, followed by erysipelas, which for some days placed life in imminent danger. There were sickness, diarrhœa, and albuminous urine. In most cases there was diarrhœa; in one a secondary abscess. The susceptibility to the contagion of measles and scarlatina shown by those patients suffering from empyema seems to indicate a condition specially favourable to the absorption of organic poisons. Assuming that these inflammations are of septic origin, the question arises, through what channel does the poison find entrance?

First, with regard to the most obvious opening for its introduction—namely, the surface of the fresh wound at the time of paracentesis. The known power of rapid absorption possessed by such freshly cut surface renders its agency extremely probable; and it is to be noted, moreover, in relation to this that in four out of the seven cases the temperature rose quickly after the operation, while the fatal termination followed with suspicious closeness—namely, in from five to nine days. But although this may be the most frequent channel, it is clear that it is not the only one by which the poison enters, if these cases are septic; for in the case of recovery the temperature steadily fell to normal for five days after the tapping, rising suddenly on the sixth, while in three fatal cases death did not take place until after an interval of sixteen, thirty, and forty-two days respectively (B——, C——, and P——). This persistence of absorptive power may be explained perhaps by the great vascularity of the newly-formed membrane on the pleura, the vessels of which are delicate and easily wounded by the passage of the drainage-tube or probe from time to time for the purpose of clearance or exploration of the cavity. That the pleura and its new membrane do possess great absorptive power, and that soluble substances actually pass by this channel into the blood, are proved by the appearance of carbolic acid in the urine after the use of carbolic washings to the pleural cavity. This occurred in one of these cases, and other similar instances are, I believe, recorded. If carbolic solution be absorbed, why not soluble septic substances? and if so, may not the poisoning be of a chronic kind, going on from day to day? The rise of temperature which follows immediately upon any retention of pus by blocking of the drainage-tube favours this view. Two other distinct results appear from the data these cases afford. The first is that if the purulent fluid in the pleural cavity be the infecting agent, it is effective without becoming sensibly foul. In one fatal case only, and in the case which recovered, had the pus perceptible smell; in all others it was apparently sweet and healthy.

The second point is, that the use of antiseptics during operation and antiseptic dressings afterwards are not protective against these seemingly septic inflammations. In three of the fatal cases these precautions were carried out by skilled hands with care and completeness. Indeed, I have thought it possible that in two instances the excessive use of carbolic acid and its absorption (it appeared in one case in the urine) rather than that of septic matter might be the source of mischief. The pus, too, may be septic before the operation, and in that case carbolic spray and dressing would be insufficient to reach all foul matter brought into contact with the absorbing vessels.

(To be concluded.)

LADY BRASSEY has promised a donation of one hundred guineas to a fund for establishing a "Seamen's and General Hospital" at North Shields, on condition of St. John Ambulance Association classes being attached.

FRACTURE OF THE BASE OF THE SKULL; RECOVERY.

BY W. B. HUNTER, M.D.

THINKING that perhaps the history of this case would be sufficiently interesting for a place in THE LANCET, I beg to forward it for insertion.

The patient, J. M——, aged thirty-two, driver of a mail-cart, was upset on the night of September 10th when driving very quickly, and was violently thrown from his cart on to the road. He was picked up and handed over to the police, who locked him up on the charge of being drunk. He vomited several times, and the vomited matter smelt of drink. When questioned whether he should like to have a doctor, he was able to say, No, and that he wanted to go to sleep. Blood was on his clothes, and was seen coming from his ear. I saw the patient eighteen hours after the accident at a private house, where he had been removed by friends from the police-cell. A diagnosis of fracture of the petrous portion (at least) of the temporal bone was arrived at from the following signs and symptoms:—There was a very considerable quantity of blood lost, as seen on the road at the place of accident and over his coat and shirt. This blood came only from the right ear; there was no external open wound. For the space of thirty-six hours blood welled out from the ear, but not so copiously the latter part of the time; then the discharge became thinner, lighter in colour, and watery. On the 12th it was wholly watery, and ceased on the 13th. At first no discoloration or bruise was observed over the mastoid region; but in about the space of thirty hours after the accident this region became discoloured, showing the effusion of blood beneath the skin. During the first two days he frequently moaned, was very restless, and only slightly conscious. When roused up somewhat, he could answer questions rationally, became collected, and complained of pain in his head and back, but more especially over his right ear; then he would soon become unconscious again, and at a succeeding examination he forgot all previous ones, or where he was or what state he was in. This condition continued for the first ten or twelve days, and afterwards he remembered nothing of them, nor of anything which took place from half an hour before the time of the accident. As regards his other symptoms and conditions, his temperature all along was normal, except that on the sixth and seventh days after the accident it was rather below the normal standard. His pulse at first was 52, soft and compressible, but quite regular and steady. On the 14th it fell to 48, and on the next succeeding eight days it fell to 40, and became very soft and weak. It became so weak one day during this period that I ordered him about a teaspoonful of brandy every two hours in a little water. The pain in his head returning more violently, and the pulse feeling stronger, the brandy was stopped in about twelve hours. On the 24th, or the fourteenth day of the accident, the pulse became stronger and firmer, and rose to 50. On two days after it got up to 60, and was otherwise natural and healthy, and continued so until he left my care for home, which was at a distance. His tongue during the first part of the time was very foul and coated, and the breath was disagreeable. He was able to micturate from the first when roused and asked to do so. This was done when he was taking some milk or or other nourishment. His bowels were well relieved on the third morning after the accident by his taking two calomel pills, two grains each, the previous night. These were repeated on the third succeeding night, followed by a dose of sulphate of magnesia next forenoon. The only other treatment in the case, besides keeping him very quiet, in a darkened room, with his hair thinned, and head raised somewhat, was giving him a draught of bromide of potassum of twenty grains, and twenty minims of solution of hydrochlorate of morphia. This was done on the evening of the sixth day of the accident, because he complained of much pain in his head, sleeplessness, and restlessness. The draught was repeated during the night, and he obtained rest and sleep. The bromide was continued alone on the succeeding day, and it was then also stopped, as it seemed to have no effect one way or another, and as the pulse and temperature were low, and there were no inflammatory symptoms. His diet at first consisted wholly of milk. After the first eight or ten days he was allowed weak broth of mutton or chicken, varied with beef-tea. Up to the fifteenth day of the accident he complained more or less of the pain in his right ear, and unpleasant noises, and for the first time said he was completely deaf in that ear. I may mention that after the discharge ceased a piece of tow or wad was put in this ear to exclude the air. On the sixteenth day after the accident he got up a little while unknown to me, and on this day the wad in the ear was slightly soaked with a yellowish discharge; next day there was none. On the seventeenth day he also got up and had tea, and continued to do so every day, sitting up longer each succeeding day until the 30th of September, when he went home. The only news I have had of the patient since is that he still complains of deafness in his right ear, and that he appeared before the magistrates on Oct. 13th in answer to an accusation of being drunk.

Remarks.—The recovery in this case I think was quick; and satisfactory as yet, no bad after-symptoms having so far shown themselves, except the deafness. But it may be asked, Was there fracture at all, through the temporal bone or any part of it? The mental conditions, the stupor, loss of memory, unconsciousness, &c., may have been caused by the concussion alone. I think, however, the great quantity of blood discharged from the ear, welling out of the external meatus, then the watery discharge afterwards, followed by the noise in the ear and the deafness, could not be accounted for unless the petrous portion of the temporal was fractured and some of the large blood sinuses passing through torn. Also that the line of fracture must have communicated with the internal ear or labyrinth, besides of course there being rupture of the membrana tympani to allow the passage outwards of the blood. Then there was the discoloration of the region behind the ear twenty-four hours after the accident from effused blood, and no appearance of any blow or contusion externally. Then, again, was the watery discharge cerebro-spinal? implying a fracture going across the meatus internus, communicating with the tympanum, with laceration of the tubular sheath of cerebral membranes surrounding the seventh pair of nerves. Or was it a watery fluid from more external sources, proceeding perhaps only from the membrane of the labyrinth? The very slow and weak pulse would be accounted for, I suppose, from nervous shock and from loss of blood, and these conditions were, I believe, beneficial and favourable to his recovery. No symptoms of paralysis of any of the nerves issuing through the temporal bone were observed.

Littleport, Cambs.

CASE OF COMPOUND FRACTURE OF THE SKULL; TREPHINING; RECOVERY.

BY ALFRED BOON, F.R.C.S.

A. B——, a negro lad, aged nineteen, an agricultural labourer, was struck on the forehead by a stone hurled with great force. He at once became unconscious. I saw him within an hour. He was still unconscious, the surface bedewed with a cold clammy sweat, the pupils equally contracted and insensible to light, the breathing slow but quiet, the pulse weak and slightly quickened. About an inch and a half above the internal orbital angle on the left side was a horizontal clean-cut wound an inch long; at the bottom of this wound a fracture could be felt, but its exact nature could not be well made out. This was at midnight on the 24th of April last. At 8 A.M. on the 25th he had become partially conscious; answered when spoken to; pupils, pulse, and respiration about normal; had a slight convulsion at daybreak.

At midday, the symptoms of compression became pronounced; relapsing into unconsciousness; has had three or four convulsions of no great severity affecting both sides. As I myself was far from well, I wrote to a medical friend, asking him to look after my patients, but he had gone into the country, not to return until night.

At 6 P.M. the friends reported that the patient had had thirteen convulsions since morning, the latter ones severe and prolonged. None of my colleagues were at hand, but I determined to wait no longer. Mr. Winter, the resident assistant to the hospital, gave chloroform. Having exposed the bone freely by a crucial incision which included the wound, I found an oval aperture in the skull nearly an inch in its long diameter, which corresponded with the wound;

its edges were smooth, and it was almost in the median line. Through it some small fragments of bone were extracted, but the larger pieces were firmly impacted. I trephined, removing a piece of bone on the outer edge of the fracture, and then had not much difficulty in removing several large pieces, some of which were depressed three-quarters of an inch. A small artery bled rather freely from under the edge of the bone, but it stopped without interference after a time. The wound was washed with a solution of carbolic acid in water, closed with silk sutures, and a pad of dry lint applied over all.

Second day.—Morning: Conscious; no convulsions since the operation; slept well; complains of pain in the head; bowels open, temperature 99·4°, pulse 88; to take three grains of calomel every three hours, and be placed on milk diet. Afternoon: Temperature 99·8°, pulse 88; less pain in head.

Third day.—Morning: Temperature 98·8°, pulse 80; wound dressed; no discharge; no smell. Afternoon: Temperature 100°, pulse 84; still slight pain in the head.

Fourth day.—Morning: Temperature 98·6°, pulse 80; bowels open. Afternoon: Temperature 99·8°, pulse 84; mouth sore; to omit calomel.

Fifth day.—Morning: Temperature 99·6°, pulse 84; head very painful; bowels not open; to take a draught containing one ounce of sulphate of magnesia. Afternoon: Temperature 100·6°, pulse 84; head still very painful, and bowels confined; to take a compound jalap powder; sutures removed; wound healing rapidly, with hardly any discharge.

Sixth day.—Morning: Temperature 100°, pulse 88; bowels not yet moved, and head still very painful; ordered castor oil and enema. Afternoon: Temperature 100·2°, pulse 84; bowels freely opened; pain in head gone.

Seventh day.—Morning: Temperature 99·4°; at 7.30 A.M. had a severe convulsion, lasting about ten minutes, and affecting both sides equally; complains of slight pain at top of the head. Afternoon: Temperature 100°; slept all day; no more spasms.

From this time there was nothing in the case worthy of special notice. He steadily improved, and on June 20th, eight weeks after the receipt of the injury, he appeared at the magistrate's court to give evidence against his assailant.

Remarks.—This case is a very encouraging one. The injury was of a very severe nature, especially when the depth to which some of the fragments were depressed is considered. It is interesting to note how the temperature rose as the bowels became constipated, and fell when free purgation was established. That no ill results should follow the convulsion on the seventh day, though it is not readily accounted for, is not surprising, a similar thing having been often recorded in like cases. The trephining was done on the outer edge of the fracture for obvious anatomical reasons. During the operation an artery, as I have described, bled pretty freely from under the edge of the bone. I found it impossible to get at the vessel and tie it; if this hæmorrhage had persisted it would have been absolutely necessary to arrest it. But how? I see nothing, failing everything else, but to trephine over the course of the artery, expose it, and then pass a ligature around it. It is worthy of notice that no antiseptic precautions, beyond cleanliness, were observed.

St. Kitts, West Indies.

A CASE OF

COMPOUND FRACTURE OF THE SKULL, WITH LACERATION OF THE BRAIN AND LOSS OF BRAIN-SUBSTANCE; RECOVERY.

BY J. F. LE PAGE, L.R.C.P.E., L.F.P.S. GLAS.

G. A——, aged fifteen years, who works in a coal mine, met with an accident by which one-half of the scalp was lacerated and torn from the cranium, and when I saw him was hanging over his left ear and neck. The pericranium was torn off from a surface two inches and a half by two inches. On the right side of the head, at a point corresponding with the meeting of the temporal ridge with the occipital bone, was a small wound, about fourteen lines in length, with irregular edges. A probe revealed a fracture, which, on mopping the wound, was seen to run horizontally, with the lower portion slightly depressed. From between the edges of the fracture brain-substance was oozing, and this oozing continued more or less for thirty-six hours. The wound was kept open, and simple water-dressing used. The left half of the head, from which the scalp had been torn, was carefully cleansed, and the edges of the wound united by thirteen hempen sutures. From end to end the laceration measured eleven inches. My patient was kept on strict antiphlogistic regimen, the state of the alimentary canal carefully regulated, the room kept darkened, and the nurse alone allowed to enter. A rapid and uninterrupted recovery was made, and in six weeks from receiving the injury he resumed his employment.

The points of interest in this case are—

1. When the boy was found he had already walked sixty yards, without any assistance, from the place in the coal mine where his head was crushed between a waggon and the rock which forms the side of the "waggon way;" and he afterwards walked home.

2. Notwithstanding the extent of injury to scalp, pericranium, cranium, and brain-substance, no unfavourable symptom whatever supervened.

3. Although the injury was inflicted on March 6th, 1880—eighteen months since—the laceration, contusion, and loss of brain-substance have not, in my opinion, in any perceptible way impaired the intellect, nor in the least degree disturbed any of those functions of brain of which we have any knowledge—that is to say, in so far as it has been possible to observe, and I have watched the case very carefully, and with much interest, up to the present time.

Durham.

CASE OF INCISED WOUND OF THE SKULL; TREPHINING; RECOVERY.

BY EDWARD COTTERELL, M.R.C.S., L.R.C.P.,
LATE HOUSE-SURGEON TO UNIVERSITY COLLEGE HOSPITAL, ETC.

THE following case, which occurred in my practice lately, is interesting as showing the favourable result of immediately trephining in cases of fracture of the skull with depression of the inner table.

E. P——, aged twenty-one, was returning home from the Volunteer Review at Windsor, when the dog-cart in which he was riding was overturned by a heap of stones lying by the side of the road. The accident took place about a mile from his home, and occurred at 1.45 A.M. on July 10th.

I saw the patient about 2.30 A.M., and found him totally unconscious, and suffering from concussion, with some signs of compression. Upon examining his head, I found an incised wound of the scalp in the left temporal region, about two inches and a half long from before back, and on introducing the finger, there could be felt an incised wound of the skull about one inch long.

On seeing how matters stood, I determined that trephining ought to be done at once, as there was undoubtedly depression of the inner table of the skull. I performed the operation at 3 A.M., and on raising the circle of bone cut by the trephine a loose piece of bone, an inch long and half an inch wide, consisting of the inner table, was seen lying on the dura mater. This was easily taken away through the trephine hole, and consciousness was almost immediately restored. The wound was left quite open, a piece of lint dipped in carbolic lotion being placed over it. About 9 A.M. the patient was seen by my friend, Mr. H. P. Symonds of Oxford, in consultation with me, and he agreed that everything had been done. An ice-bag was applied to the head and five grains of calomel put on the tongue; later in the day a copious enema was given with good result. The following is a record of the temperature and pulse:—July 10th: 11 A.M., temperature 99°, pulse 60; 3 P.M., temperature 101·2°; 7 P.M., temperature 100·7°, pulse 64; 11 P.M., temperature 101·2°. July 11th: 3 A.M., temperature 101°; 7 A.M., temperature 100·7°; 11 A.M., temperature 100·8°, pulse 64; 3 P.M., temperature 99·8°; 7 P.M., temperature 100°; 11 P.M., temperature 100·6°. July 12th: 3 A.M., temperature 99°; 7 A.M., temperature 98·6°; 11 A.M., temperature 99·2°, pulse 60; 3 P.M., temperature 98·4°; 7 P.M., temperature 98°, pulse 48; 11 P.M., temperature 98·4°. July 13th: 3 A.M., temperature 98°; 7 A.M., temperature 98°; 11 A.M., temperature 98·6°, pulse 56; 3 P.M., temperature 98·2°; 7 P.M., temperature

98·2°, 11 P.M., 99°. Temperature ever since has remained perfectly normal.

July 11th.—Patient had a rather restless night, but towards morning slept well. In the afternoon slept well.—July 12th: On visiting the patient this evening the pulse was found to be only 48, very soft and compressible. The whole condition of the patient indicated profound weakness. A mixture was prescribed containing some carbonate of ammonia and chloroform, which appears to have acted very well, as the pulse the next morning rose to 56, and the day after to 64.

The wound healed by granulation, and was perfectly closed by Aug. 7th, one month after receipt of injury. As will be seen, the patient never had a bad symptom after the operation, a result very seldom seen in these serious head injuries. On Oct. 1st, after a holiday at the seaside, the patient resumed his business, and now does not seem any the worse for his accident, except that he suffers occasionally from neuralgic pains at the seat of injury.

Bicester.

REMARKS ON A CASE WITH PARADOXICAL TEMPERATURES.[1]

BY F. A. MAHOMED, M.D.,
PHYSICIAN TO THE LONDON FEVER HOSPITAL, MEDICAL REGISTRAR TO GUY'S HOSPITAL.

DR. MAHOMED gave some details of a case with paradoxical temperatures which had been under observation at Guy's Hospital. The patient, a woman, was under the care of Dr. Moxon, but for a considerable part of the time, during which she presented extraordinary temperatures, she had fallen temporarily under Dr. Mahomed's charge. She had also been under the care of Dr. Goodhart.

M. W——, aged twenty-two, was admitted on Sept. 30th, 1878, and died March 30th, 1880, having been under observation for eighteen months. She was an excitable, vivacious, and rather hysterical woman, by occupation a nursemaid. She said that she had passed through a mild attack of scarlatina seven years ago, and that it was followed by general œdema. She had previously been in the hospital in December, 1876, under Dr. Habershon, suffering from anæmia and irregular menstruation. She then exhibited no unusual symptoms. She was on the present occasion admitted for phthisis, chiefly affecting the left lung. She had suffered from cough for four months. Hæmoptysis occurred for the first time five days before admission. Her symptoms were those of acute phthisis from the time she entered the hospital. She suffered much from hectic fever, night-sweats, and pain in the left chest. She frequently complained of nausea, and sometimes vomited. She was liable to headache, neuralgia, and fits of depression. Her temper varied greatly. She was very weak. Her temperature was taken regularly morning and evening from the beginning of March, 1879. During March, April, and May it varied between normal in the morning and 102° in the evening; on some occasions it reached 103°. From the first week in June it attained a higher level, only occasionally falling below 101°, frequently rising to 103°, often to 104°, and even to 104·8°. On July 23rd it first became phenomenal, the thermometer registering 106·4°; and on July 25th 107·4° at 8.45 P.M., and at 10 o'clock the same evening 110·8°. On this occasion it was noticed that her respiration was hurried, but otherwise she was much as usual. During the rest of July and August no temperature is recorded lower than 102°, but only on five days did it rise above 105°. On each of these occasions several high temperatures would be recorded on the same evening, each usually higher than the preceding, the observations being often terminated by the index becoming lodged in the end of the thermometers employed. In the beginning of September the clinical clerks were changed, and she had one who was new to his work. She came under Dr. Mahomed's care soon afterwards. Her case had now excited general interest, and she appeared to give free rein to her fancy, and produced all sorts of variations in her temperature in the most reckless manner. The thermometers placed simultaneously in various parts of her body would give various readings at the same moment, and two or more successive observations on one part would give variations from normal up to 120°, within a few moments of each other. During September Dr. Mahomed made many observations on the patient, which were recorded on the bed letter, and were to have been copied into the report, but unfortunately the bed letter was lost before they had been copied. The first observation made was in the presence of Dr. Taylor and several students who were standing round the bed. Three thermometers were used at the same time, one being placed in the mouth, and one in each axilla; they were not held in. On removal on one side the thermometer registered about 102°, in the mouth 107°, and on the other side 114° (these numbers are not exact). The thermometers were then all changed, the highest temperature being now recorded in the opposite axilla, and that in the mouth was about 104°. They were again changed, with fresh results. It appeared that the only check to the position of the index was the length of scale of the thermometer, it being frequently, and at this time indeed usually, lodged in the small expansion of the tube at the top. Some thermometers were now procured from Mr. Hawksley, which had a scale for several hundred degrees, but these were non-registering, and by means of them only ordinary temperatures were obtained. The house-physician, Mr. Baldwin, obtained a self-registering clinical thermometer with a scale reaching to 130°, and with this an indication of 128° was given on Oct. 15th. She appears to have felt that she had gone too far on this occasion, for comparatively few high temperatures were recorded after this, but about thirteen times during the next five months. It was especially noteworthy in this case that a high temperature was never indicated by a non-registering thermometer, though they were often used. She frequently objected to the use of these, which were of larger size than the ordinary clinical thermometers, calling them "horse thermometers." Dr. Taylor obtained the loan of some surface thermometers, which were strapped on the chest-wall, but gave nothing but ordinary results, although extravagant temperatures had been recorded immediately before. The high records could be obtained at any time in the day, and appeared entirely under the control of the patient, who would frequently state beforehand that the temperature would not be high. The high temperatures were not accompanied by any corresponding increase of pulse rate or respiration, though afterwards her breathing was sometimes noticeably hurried, as if from exertion. No high temperature was ever obtained by Dr. Mahomed when he kept his hand on the arm of the patient during the time the thermometer was in the axilla. No increase of temperature of the skin or in the axilla could be detected by the touch during or immediately after the record of an extraordinary temperature, nor was the bulb of the thermometer hot at the time of removal, as it would necessarily have been had the temperature of the body been really high.

Other indications of fraudulent symptoms were obtained under the following circumstances. During the latter part of September the patient professed to be unable to retain any food on her stomach, and to be living entirely on lemonade and soda-water. Dr. Mahomed had her placed in a private room and strictly watched on Sept. 30th. On Oct. 1st she took only two ounces of milk, on the 2nd it had increased to fourteen ounces, on the 5th reached a pint, and on the 8th two pints, in the twenty-four hours. Her urine had been measured, and the urea it contained estimated during the whole of September and October, but it gave no indication of a decreased or increased diet. It must, however, be stated that the recorded quantities of urine and the amounts of urea are too variable to be reliable. Although during June, July, and August her temperatures had been progressively increasing and always high, yet her body weight, which was 115lb. on Dec. 9th, 1879, had only decreased to 112lb. on Sept. 9th, 1880, being a loss of only 3lb. in nine months. During the next three months she lost 10lb., her weight falling to 102lb. by Nov. 30th; but her physical signs of disease had been steadily increasing throughout this period. She was frequently charged with outwitting her doctors and asked to explain how she did it. She generally denied any deception, but often smiled, and sometimes said "Why don't you find it out?" Her method, however, was never discovered. On March 14th, 1880, she unfortunately developed the ordinary symptoms of scarlatina, and died on March 30th. The necropsy revealed nothing unusual; there was advanced disease of the left, and more recent of the right lung. Dr. Mahomed remarked that

[1] These remarks were made at the meeting of the Clinical Society of London on Oct. 28th, 1881.

it was easy to send the index of an ordinary clinical thermometer up to the top, in from ten to fifteen seconds, by rubbing it between the slightly moistened finger and thumb, exerting at the same time considerable pressure on the bulb. The same result can be obtained by enveloping the bulb of the thermometer in several folds of silk and placing it in the mouth; then inspiring by the nose and expiring by the mouth; this no doubt is produced by the evolution of the latent heat of the watery vapour of the breath, as it becomes condensed upon the silk.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

OSTEO-SARCOMA OF FEMUR; AMPUTATION AT HIP-JOINT; DAVY'S LEVER; RECOVERY; SUBSEQUENT RETURN OF DISEASE IN STUMP AND DEPOSIT IN LUNGS; DEATH.

(Under the care of Mr. THOMAS BRYANT.)

FOR the following notes we are indebted to Mr. Adeney.

Alex. Wm. W——, a soldier in the cavalry forge department, aged twenty-three, was admitted into Job ward on Feb. 25th, 1880. He had always enjoyed excellent health, and had never had gonorrhœa or syphilis. Three years before he felt a dull pain behind the trochanter major, increased by standing, and was allowed a day's rest. He rubbed in some liniment, and the pain left for more than two years. In February, 1879, the pain returned, and he was treated in the Woolwich Hospital (being a soldier) for eleven days as for rheumatism, and was discharged as well. In May, after a hard field day, he felt pain again when dismounting, and was in the Hounslow Military Hospital for three weeks again for rheumatism (?), and was discharged quite well. In July he was under canvas at Aldershot, and during September he had occasional pain in his hip. In October he was one day suddenly seized with pain in the hip, and went into Hounslow Hospital, where he was blistered. A swelling also appeared in the groin, which was treated with fomentations and disappeared. An abscess pointed, and was opened below and behind the trochanter major, but very little pus was discharged. A sinus remained, and did not close for four months. On December 26th, when limping about the ward, he felt something "go" in his thigh, and he fell sideways on to a table. He had not noticed any swelling at this time. After this he was in great pain when moving the leg or on standing upon it. Soon the hip began to swell rapidly, and pain to extend as far as the knee on both sides of the thigh. Latterly the limb had wasted a good deal.

On admission there was a large, round, even swelling at the upper extremity of the right femur, which felt hard and firm. The outline of the trochanter had entirely gone. The femoral artery passed over the front and inner side of the swelling. The tumour did not pulsate. There was a good deal of œdema of the leg. The right leg, from the anterior superior spine to the external malleolus, measured 33½ in.; and the left 34⅝ in. The swelling extended round the margin of the sacrum. The tuberosity of the ischium could just be made out. Laterally the growth rose to a level with the anterior superior pelvic spine. It was uniformly hard but elastic, and at no point was there any fluctuation. The site of the former incision was now pink and prominent. The circumference close to the groin was 23½ in. in the left leg, and 16⅝ in. in the right.

On March 5th, under chloroform, an incision was made over the common femoral artery, which was divided, and both ends twisted. The femoral vein was tied. The first incision was then carried outwards, and external and internal skin flaps made. The muscles were next divided, and amputation of the thigh performed, Mr. Davy having introduced his lever through the rectum to stop the blood in the iliac artery. Very little blood was lost. The head of the femur was quite loose, and the part below the great trochanter was enlarged, so as to appear merely a shell. "The growth appeared to spring from the neck of the femur. It grew forward and upwards, infiltrating all the muscles and reaching far up into the buttock. The neck of the femur was broken, the bone being very rough and jagged. The capsule was invaded, and at one point was softened through, the joint being just penetrated. The cartilage was healthy. The growth was composed chiefly of soft, vascular, dark-coloured material, with long bony spicules radiating through it. Microscopically the soft part consisted of small round-celled sarcomatous material, with very little stroma."—(Symonds.) On the following day the patient was very sick, and a morphia subcutaneous injection was given. On the 11th the wound discharged a great deal of thin purulent matter, but a week later the upper and lower parts of the wound were found to have united by first intention, and the temperature was normal. There were some sloughing spots on the back, caused by the pressure of an elastic bandage, which had been put on to guard against hæmorrhage. On the 23rd felt plaster was applied to the back.

On April 2nd he had rash all over the hands, arms, and face. It itched, and became white on pressure. On the 5th the rash had disappeared. A fluctuating swelling over the tuber ischii was opened, and about an ounce of pus came away. On the 15th the patient got up. On May 5th the wounds on the back and sides were nearly well. On the 10th he was convalescent, and left for Bognor.

The patient returned in July, looking quite well, and without any signs of return of disease.

Temperatures: March 26th, 98·8°; 27th, 98·4°; 28th, 97°; 29th, 97°; 30th, 99·8°; 31st, 99°; April 1st, 98·6°; 2nd, 98·9°; 3rd, 98·8°; 4th, 99°; 5th, 99·8°; 6th, 99·2°; 7th, 99·6°; 8th, 99·8°; 9th, 98°; 10th, 99·6°; 11th, 99°; 12th, 99·4°.

On October 14th, 1880, the patient was readmitted. The stump of the right thigh was occupied by a dense hard mass which infiltrated the skin nearly as far inwards as the spine of the pubes; the mass seemed firmly attached to the pubic bone. Patient had a bad cough, which he said he had had for three weeks. No pain except dull aching between the shoulders. During the night, in spite of a subcutaneous injection of morphia, he had a hard irritating cough. On sitting up there was a good deal of dyspnœa, and he perspired freely about the face. The left base was dull to nearly the angle of scapula with absence of breath sounds; above the line there were sharp râles. In front, above the nipple there were also râles, and a doubtful pleuritic sound. On the 16th Dr. Pye-Smith saw the patient and reported left base dull with no respiratory murmur, râles higher. Expectorations grumous, tenacious, rusty. Skin moist, not burning. Pulse hard, quick, regular. On the 17th the breathing was very laboured, and the patient was much worse. Next day Dr. Pye-Smith saw him again and noted skin cool, respiration quicker and deficient at both bases. No moist sounds or crepitation

He gradually got worse, the breathing became quicker and more laboured, and he died at 11 P.M. on October 21st. Temperatures: October 18th, morning 97·4°; 20th, morning 97·8°; 21st, morning 99·8°.

Necropsy.—Both lungs packed with new growth so as to be almost solid. Extensive recurrence in stump. No enlargement of lumbar glands. No other secondary growth.

ROYAL BERKSHIRE HOSPITAL.

ABSCESS OF THE PANCREAS WITH LARGE LUMBRICUS OBSTRUCTING THE PANCREATIC DUCT.

(Under the care of Dr. JOHN SHEA.)

Mary Ann M——, aged twenty-nine, married, with three children, was admitted on May 17th, 1881. She had generally good health till fifteen months before admission, when she first felt pain in the region of the liver, slight at first, but increasing later, and of a shooting character. She had no sickness; the appetite was bad, urine normal, bowels regular, and fæces dark. She had had poor living for some time.

On admission she complained of considerable tenderness over the gall-bladder, was slightly jaundiced, and had been so for about a fortnight. She slept badly, and had some

cough. On examination the lungs and heart were normal. Under treatment with alkaline mixture with pills of euonymin and henbane she rapidly improved, and on May 24th got up at her own request, and she went out into the grounds on the following day. By May 31st she appeared quite convalescent, though a little weak.

On June 3rd she stated she was not so well, and had had no sleep during the night; pain had returned over the gall-bladder, and there was nausea. In the evening there were pain and sickness, with vomiting of dark bilious matter. The patient was again distinctly jaundiced. She was treated by sinapisms and effervescing medicine. The bowels were freely open, but the sickness continued. She was worse during night, the breathing gradually got short and difficult, and at five o'clock on the morning of the 4th she lapsed into unconsciousness. Sinapisms were applied, and beef-tea and brandy enemata were administered. She remained all day with feeble pulse in the same condition, and died without rallying next day at noon.

Necropsy.—The body was fairly nourished and distinctly jaundiced. The lungs were slightly congested at the base. Liver large, pale, and soft. Pancreas enlarged and hard, being the seat of an abscess containing pus. A round worm seven inches long was found folded upon itself, lying in and obstructing the pancreatic duct, the larger portion of the worm being in the duodenum. The intestines were healthy. No other worms were present, and none were known to have been passed previously. Heart somewhat large and fatty. Kidneys pale.

DECCAN CENTRAL GAOL, POONA.

CASE OF ABDOMINAL ANEURISM.

(Under the care of Dr. SALAMAN and Dr. E. D. MACKELLAR.)

THE following case is perhaps of some interest, as it presented many of the signs usually considered to indicate that a tumour of doubtful nature is *not* an aneurism, and as it seemed to have almost undergone a spontaneous cure:—

A. B——, a Hindoo, aged thirty, was admitted into the Gaol Hospital, complaining of a painful throbbing swelling in his abdomen. He said that he had noticed it three months before, but as statements by natives of his class are frequently incorrect, the account he gave could not be entirely relied on. The pain was constant, but subject to exacerbations. The skin below the inferior margin of the liver and to the right of the middle line was raised above the general level of the integument. The projecting portion somewhat resembled in size and shape the larger end of a hen's egg, and rose and fell at regular intervals of time. The skin was natural in colour, and not adherent to the parts beneath. On deep palpation a smooth widely lobed tumour was made out, which seemed to fill the hand when the fingers were slightly flexed. It appeared to be longer from side to side than from above downwards. It could be freely moved from right to left, but little, if at all, in the direction of the long axis of the patient's body. There was a narrow but well-defined tract between the tumour and the liver that gave a clear percussion note. There was no local or cardiac murmur, and no expansile pulsation. The pain complained of did not seem to be very deeply seated, as if the spinal column were being pressed upon, but rather as if the intestines were being interfered with. The patient lost flesh and strength rapidly, and died about two months after admission. His death was hastened by an intercurrent attack of subacute dysentery; but, even before the dysentery came on, he was so emaciated that, in any case, he could not have lived for a long time. Shortly before death the tumour became smaller, firmer, and less moveable.

At the necropsy a small preliminary incision was made into the abdomen and the hand inserted, but the nature of the tumour could not be made out. When a free incision was made the tumour was found to be covered partly by omentum and partly by intestine, which had to be separated by dissection. One portion of the small intestine was much discoloured, and so thinned and firmly adherent to the tumour that it was left in position, as it could not be detached without injury. Another portion had suffered so much from pressure that, though not adherent, it was almost gangrenous. As the tumour seemed to partially surround the aorta, and to be firmly attached to it, the vessel was cut through in two places and the mass removed. The removed portion of the aorta was split up posteriorly, and the tumour was freely incised. The latter was then found to be a sacculated aneurism close to the cœliac axis, communicating with the aorta by a narrow mouth. It was filled almost throughout by firm stratified clot. The sac was generally thick and strong, but in parts soft and thin, and the corresponding portion of the contained clot was also of diminished consistency. The clot at the mouth of the sac was paler and denser than that of the cavity, and was fairly on a level with the internal coat of the aorta. The aneurism measured about 4½ in. by 3 in., and its mouth 1½ in. by ⅞ in. With the exception of the dysenteric lesions of the bowel the viscera were normal.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

An Ear of Corn discharged through the Chest.—Muscæ Volitantes.—Myoma of Kidney.—Longitudinal Fracture of Femur.—Fatty Osteoporosis.—Necrosis of Skull-cap.—Congenital Absence of one Hemisphere of Cerebellum.—Abscess in Head of Tibia.—Cancer of Kidney associated with Calculus.—Thickening of Pericardium.—Sacculi of Intestine.

THE ordinary meeting of the Pathological Society of London was held on Tuesday, November 1st, the President, Dr. S. Wilks, in the chair. Several interesting specimens were exhibited, the chief of which were three tumours containing striped muscular fibre growing in or on the kidney.

The PRESIDENT showed an Ear of Corn discharged through the Chest. He saw a child with Dr. Massey of Camberwell suffering from an abscess over the left supra-scapular region, the skin over it feeling boggy. No evidence of effusion of the chest. A grooved needle was passed in, and a puff of air and pus came out. Free suppuration occurred, and after a time an ear of corn was passed, and then the wound healed. On inquiry no history of how or when the ear got into the lung could be obtained; the child had not been ill. No doubt the ear of corn had been inspired. Watson mentions several cases of such bodies passing into a bronchus, but all ended fatally. A similar case has recently been recorded in America, but with this exception Dr. Wilks knew of no other such case terminating in recovery. — Dr. GOODHART remarked on the frequency with which foreign bodies get into the bronchi without causing acute symptoms. He had twice found gangrene of the lung associated with the impaction of a piece of bone in a bronchus, which had not excited any notice at the time of its inhalation.—Mr. N. MOORE suggested that the ear of corn should be referred to a skilled botanist, because possibly it was a species capable of a spiral movement, by which it worked its way to the surface.—Mr. EVE mentioned a specimen in St. Bartholomew's Hospital museum of an umbrella ferrule in the bronchus, and abscess in the lung, in which there was no history to show how or when this large body entered, and the case had been regarded as one of simple phthisis.

The PRESIDENT also showed drawings of Muscæ Volitantes from himself and by himself. As there are no drawings of such objects in English works accessible to him they appeared worthy of being shown. They have been well described, and are bodies floating in the vitreous. On any given occasion he first sees a number of circles with hollow centres like nucleated cells, then small bead-like bodies scattered through the field, then these linked together into chains or nucleated fibres in all kinds of shapes. He asked if there is a good drawing of muscæ in any book, and if there is a good drawing illustrating the histology of the vitreous to be found anywhere, and also whether these floating bodies are entirely new structures or altered states of pre-existing parts.—Mr. HUTCHINSON thought there were drawings of muscæ in several books. He had had many examples drawn by patients. He knew of no recorded microscopical examination of the morbid structures, but considered they must be modifications of normal constituents.

Mr. EVE showed specimens of a Striped Muscle Tumour of the Kidney, sent to him by Dr. Brickwell. A male child,

aged thirteen months, was treated for a tumour in its right loin, which was soft, small, and fluctuating. It was tapped six times without result. It rapidly increased, and slowly produced pressure upon the abdominal and thoracic organs. At death it extended from the ribs into the pelvis, and reached inwards to the middle line. It measured seven inches by four and a half; was nodulated, encapsuled, uniform in consistence, and yellowish-white in colour. On section interlacing bundles of fibres and cyst-like spaces were seen. The right kidney showed a depression produced by absorption during the growth of the tumour. It was mostly composed of striped muscular fibres in parallel bundles, the fibres being very long and very narrow, and the sarcolemma indistinguishable. Nodules of round and spindle-celled sarcoma tissue were scattered through it. A specimen of Hunter's from the College of Surgeons Museum, called "medullary disease of the kidney of a child," was also shown. Attached to the hilus of the left kidney is a small nodular tumour of yellowish-white colour. To the right kidney is attached a tumour of much greater size. In both the tumour is separated from the kidney by areolar tissue. Histologically they both resembled that shown by Mr. Eve. The cysts seen are spaces without epithelial lining, produced by degeneration of masses of sarcoma tissue. Mr. Eve had not found any record of similar cases in England. Eberth described a myxoma of the kidney in 1864, and Cohnheim one in 1866, and two other cases have been since described, all in Virchow's *Archiv*. There are, therefore, six cases now recorded. They all occurred in children under eighteen months of age. In four the tumour was bilateral. In two there were metastases, in one in the liver without muscle tissue, in one beneath the peritoneal covering of the diaphragm, where the muscular fibres were numerous. In one case a small appendage of similar structure was connected to one of the tumours by fibrous tissue. They were all distinctly limited from the kidney structure, although some were in the hilus, and others within the capsule; they, therefore, originate not from the kidney structure proper. Cohnheim has suggested that by a faulty segmentation of the protovertebræ some muscle-fibre germ may be included in the kidney. Dr. Klein has found striped muscle between the cortex and medulla of a child.

Dr. DAWSON WILLIAMS showed a Tumour of the Kidney, removed from the body of a male child, aged thirteen months, who died in the Victoria Hospital for Children. The child had been under the care of Mr. Walter Pye, but was moribund when admitted, and died in three days of exhaustion. Post mortem, a tumour, weighing 1 lb. 13½ oz., equivalent to about one-sixth of the total body weight, was found taking the place of the right kidney; it was completely encapsuled, and the ureter could be traced into its inner aspect. To the naked eye a section had an encephaloid appearance. Microscopically, it was found to have a fibrillated structure; the fibres were arranged in bundles, which crossed and interlaced in every plane; some of these fibres were slightly spindle-shaped, and had an indication of a nucleus, others, however, were elongated, and sometimes branched. Dr. Klein, who had examined the earliest sections made, expressed the opinion that these fibres were striated muscular fibres, and subsequent more careful preparation demonstrated beyond doubt that this opinion was correct. In most instances the fibres showed the striation well, but it was most marked in the largest, most cylindrical, and best developed fibres. In some parts of the tumour tracts of small round-celled growth occurred, intermingled with the muscular bundles, and every gradation in size and form could be traced between the well-developed muscular fibres and these round or slightly spindle-shaped cells. In all parts of the tumour sections of the kidney tubules, and bodies believed to be altered Malpighian corpuscles, were encountered. —The PRESIDENT was not at all aware of the existence of such tumours, and pointed out the great interest of the specimens.—Mr. PYE said that Dr. Williams's case, which had been under his care, had greatly interested him. He had examined Dr. Williams's specimens. There was no doubt that the tumour contained muscular fibres; he showed a drawing of some of these fibres. His patient's tumour differed from Mr. Eve's in that the tumour was in the kidney, and not outside of it. Malpighian corpuscles and renal tubules were plainly seen between the fibres of the tumour. Some of the fibres seemed to have undergone colloid degeneration. The two cases were referred to the Morbid Growths Committee.

Mr. MORRIS showed two photographs of a specimen in the Lyons museum. They were of a longitudinal Fracture of the Femur, extending from the neck to its lower third, dividing it into almost equal portions, which had united by a few narrow bands of bone. The specimen was of great interest, as the existence of that form of fracture had been denied.

Mr. R. CROSSE showed a case of Fatty Osteoporosis. The patient was a man aged twenty-two; in 1870 he suffered from caries of the wrist, for which the joint was excised, and then the forearm amputated; then he had caries of the left ankle, with suppuration for five years. In 1873 the right ankle became carious and discharged till six months ago. In 1875 a large abscess appeared over the left knee. In February, 1877, he took to his bed and has not left it; he has been bedridden for nearly five years, and had constant suppuration for eleven years. There was much albumen in the urine. The left lower limb was normal except for its great thinness, and stiffness of the ankle. The external bulk of the bones was equal on the two sides. The right lower limb (the one shown) was twice the girth of the left, puffy and incapable of voluntary movement. The limb was removed at the middle of the thigh. There was no retraction of the flaps, all the tissues being fatty. The limb removed appeared to be a mass of fat, with thin lines of bone, representing the compact outer wall of the bones; no bony cancelli. The muscles were mere masses of fat with fibrous septa. The tarsal bones were barely distinguishable. The marrow cells were large, containing crystals of margarin. The bones of the other limb appeared not to be undergoing fatty degeneration.

Dr. ISAMBARD OWEN showed a specimen of Necrosis of the Skull-cap after a Burn. The sequestrum measured 4 by 4½ inches. The outer surface was smooth, the inner was rough and eroded. It was taken from a man aged fifty-six, who fell into the fire five years before. The bone was exposed at the bottom of an ulcer five inches across. In St. George's Hospital a good deal of bone was removed by strong sulphuric acid, and by Hey's saw. He died from exhaustion. The dura mater beneath the dead bone was greatly thickened.

Mr. PEARCE GOULD showed the Occipital Bone in a case of Congenital Absence of the right half of the Cerebellum, and a drawing of the Brain by Mr. James Black. The subject of this malformation was a man who died at the age of eighty in the Lambeth Infirmary. He had been a gardener for sixty years in one situation, and during his three months' residence in the infirmary no sign of nerve lesion was noticed; he was rational, could walk with assistance, but was suffering from great debility. Some weeks after death the condition was discovered in the dissecting-room of Westminster Hospital. The brain was so decomposed that it could not be preserved or accurately examined. The right half of the cerebellum was completely absent. The left cerebellar fossa of the occipital bone was large, the right was very small and shallow, and the groove for the superior longitudinal sinus continued on across this fossa to the jugular foramen, where it was joined by the superior petrosal sinus which grooved the mastoid bone in the place of the lateral sinus, for which there was no groove in the usual position in the occipital bone. The bone forming the shallow fossa was thicker than on the other side.—Mr. TREVES remarked that the part of the occipital bone corresponding to the right cerebellar fossa was greatly thickened, and suggested that it was an example of hypertrophy of bone associated with atrophy of the brain.—Mr. EVE said that Sir J. Paget in his Lectures at the College of Surgeons had recorded a case similar to that alluded to by Mr. Treves.—Mr. HUTCHINSON mentioned that a case of hypertrophy of the skull following on atrophy of the brain was recorded by S. Van der Kolk.—Mr. MORRIS said it was not right to speak of it as a case of absence of cerebellar fossa, as that depression did actually exist.—Dr. BARLOW asked if the condition of the opposite half of the cerebrum had been observed in Der Kolk's case of absence of one hemisphere of cerebellum. The opposite half of the cerebrum was greatly atrophied, and this had been found in other cases.—Mr. GOULD replied that he had considered whether this case was really one of atrophy of the cerebellum; but the facts that the bone was distinctly flattened on the outer side, over the absent part of the brain, and that the lateral sinus of that side took an unusual course across what ought to be the cerebellar fossa, he thought showed conclusively that it was a congenital deformity, not atrophy, of the part.

Mr. PEARCE GOULD showed a specimen of Abscess in the Head of a Tibia which was removed from a man aged twenty-seven, who, fourteen years ago, first noticed a

swelling over the inner tuberosity of the tibia; four years later he entered the Homœopathic Hospital, when this swelling—an abscess—was opened, and after some months he was discharged with a sinus. He continued in this state till May of this year, walking to and fro to his business, and free from pain. But in May his knee-joint became swollen and intensely painful, and in July amputation of the thigh was performed by Mr. Gould for the suppuration of the joint and hectic. A cavity one inch and a quarter long, and large enough to admit the finger, was found in the head of the tibia, running horizontally with indurated walls, and loosely filled with small fragments of bone. The disease had spread into the joint in two places, through the cartilage over the inner condyle, where a small piece of cartilage was entirely eroded, and also just in front of the spine of the bone close to the inner condyle. In neither situation did the cavity of the abscess communicate with the joint. An exostosis was growing from the front of the tibia close to its tubercle.

Dr. N. MOORE showed a specimen of a very much enlarged Kidney, whose pelvis was occupied by a large stone, weighing about three ounces. The ureter was greatly thickened and occluded by a friable mass. No new growth in the ureter or bladder, or anywhere but in the kidney. A microscopic section showed it to be a cancer clearly originating in the epithelium of the renal tubules. The cancer was therefore undoubtedly primary in the kidney. The man was twenty-five years old at death. At three years of age he had a fall from a swing and then passed blood in his urine, and from that time his urine contained pus till admission under Dr. Southey's care, when the pus gradually lessened. The tumour was found projecting under the ribs. He died from exhaustion. No doubt the fall caused hæmorrhage from a kidney with a calculus already formed in it, and the origin of the cancer might be explained on the theory of prolonged irritation.—The PRESIDENT remarked on the great interest of Dr. Moore's case, as showing the influence of calculus on cancer; this was seen in cases of gall-stone also.

Dr. COUPLAND showed a card specimen of Cancer of the Kidney, associated with Renal Calculi.

Dr. BROADBENT showed a piece of the front of the Pericardium of a man, aged twenty-three, who had been ill for three months, when he was sent to London for change. One day he was seized with a very severe attack of dyspnœa on going upstairs. Mr. Archer detected left pleural effusion. The case then came under Dr. R. Broadbent's care, who found also the signs of pericardial effusion. On rest he improved, and the pleural fluid disappeared; but the dyspnœa recurred in a very dangerous form several times. The pericardium was tapped by Mr. Savory in the fifth left space, midway between nipple and sternum; the trocar was driven in three times to a depth of one inch and a half, without drawing fluid or piercing the heart. The man died in three days. The pericardium was found of an enormous size, and very thick, varying from one-third of an inch at lower part to one inch and a half above and round the great vessels. It was occupied by much bloody fluid, and the heart was small; the pericardium did not collapse when opened; it was smooth on the inner surface. It appeared to have compressed the aorta and vena cava, where it surrounded them, and so caused dyspnœa. He asked to have the specimen referred to the Morbid Growths Committee. He thought the growth was sarcomatous; but it had been suggested that the thickening was inflammatory, and it was desirable to have that point settled.

Mr. SHATTOCK showed a card specimen of Sacculi of the Small Intestine, which was removed from a man under Mr. Beck's care, who was admitted into University College Hospital in a dying condition, and no history could be obtained.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

Strangulated Hernia (Littré's) or Partial Enterocele.—Double Hæmorrhagic Pleurisy with formation of Cholesterin.—Gastrostomy and Œsophagostomy in Stricture of the Pharynx and Œsophagus.—Paradoxical Temperatures.

THE ordinary meeting of this Society was held on the 28th ult., Joseph Lister, Esq., F.R.S., President, in the chair. The papers read were all of considerable interest, and gave rise to much debate, except in the case of Mr. Reeves's paper, the discussion upon the important question raised in it being deferred in order to allow the discussion on Dr. S. Mackenzie's paper to take place. This was a paper dealing with the subject of excessively high and abnormal temperatures, and the meeting was prolonged to a late hour in discussing it.

Mr. C. T. DENT read a paper on a Case of Strangulated Hernia (Littré's) or Partial Enterocele. After remarking that the term "Littré's hernia" had now acquired rather a loose signification, and that several varieties had been described since De Littré's original article, the author narrated the case of W. G——, aged thirty-seven, a phthisical emaciated man of intemperate habits, who was admitted into St. George's Hospital in February, 1881. The patient had never noticed any rupture till the day before admission, when he observed a tender swelling in the left groin. Two days previously he had vomited after taking food. The day after admission he vomited again after taking some milk, and the bowels acted several times. The swelling was the size of a small Tangerine orange and slightly tender; no impulse; tongue dry and red; marked distress. The diarrhœa continued, and while he was being put under ether he passed a quantity of fluid fæces. The hernial sac was greatly inflamed and thickened, and the parts so matted together, that careful dissection was necessary. On dividing a slight constriction the hernia was felt to go back; the sac was not opened. The tissues were so lax that the entire sac was readily displaced beneath Poupart's ligament. The symptoms were relieved for the first two or three days, but persistent diarrhœa then set in and proved fatal on the sixth day. Post mortem extensive disease of the lungs was found. The hernia proved to have consisted of a portion only of the circumference of the jejunum; a dark semi-gangrenous ring, corresponding to the constricted part, was seen on the gut. Extensive enteritis of the ileum was found, which may have accounted for the diarrhœa. The case resembled those described by M. de Littré in that there was no intestinal obstruction, fæces passing freely; in that hiccough was absent, the vomiting being not persistent or stercoraceous, and the abdomen not distended. It was peculiar in the following points—(1) It occurred in a man; (2) the jejunum was involved; (3) the hernia must have existed for some time without being noticed; (4) there was no diverticulum or sacculation of the gut, which post mortem was found at a considerable distance from the sac. In conclusion, the author advocated removal of great part of the hernial sac when, as in this case, it is thickened, inflamed, and ulcerated, and the closure of the neck of the sac by deep sutures.—The PRESIDENT remarked that most obstinate constipation was seen in cases where the intestine was not involved at all—viz., omental hernia. Symptoms of strangulated hernia may be seen also in inflammation of the spermatic cord. He recollected a case of this kind at Edinburgh Infirmary. He cut down and found a small mass of fat, but could find no sac, and divided the constriction. The patient died, and on post-mortem a piece of subperitoneal fat was found to be strangulated.—Mr. ROYES BELL suggested whether it would not be better, in Mr. Dent's case, to have opened the sac and searched. At King's College Hospital Mr. Wood sews up the orifice of the sac, and after that the tendinous portions of the ring are drawn together; that was very good practice, antiseptics being understood. There must be extensive peritonitis to require a drainage-tube.—Mr. HAWARD supposed Mr. Dent meant that the sac should be left open to allow of drainage of inflammatory materials from the sac and not from the peritoneal cavity; and this was a reason for opening the sac, which if left unopened would be returned with its septic contents into the peritoneal cavity. Mr. Haward had adopted the practice, mentioned by Mr. Dent, of sewing the walls of the sac together.—Mr. H. MARSH said the question of opening the sac was of great importance, especially since Mr. Hutchinson's dictum that peritonitis in hernia occurs only from perforation or from the operation. He agreed with the views expressed by Mr. Haward. The worst thing to happen to a patient is that a teaspoonful of putrid fluid should be returned to the peritoneum by replacing an unopened sac. He had not met with a case in which Mr. Hutchinson's statement proved to be wrong.—Mr. DENT, in reply, said that in these cases of Littré's hernia there is not constipation; there may be profuse diarrhœa, and that is no contra-indication to the operation. He did not mean to imply that the peritoneal cavity was to be drained, but said that in such a case as this, with an inflamed and ulcerated sac, he would close the neck with deep sutures; but if the sac remained, only its neck would be closed, and drainage would be outside the peritoneum.

Dr. CHURTON (Leeds) read notes of a Case of Double Hæmorrhagic Pleurisy, with formation of Cholesterin. A man, aged thirty-eight, of originally good constitution, always temperate, not syphilitic, had, in 1876, a wide-spreading axillary abscess, the result of a wound on the left hand. The abscess continued to discharge for six months. His health was never perfect after this time. In 1878 he became positively ailing; was short of breath on exertion, and lost flesh. He had no cough, no hæmoptysis, and scarcely any pain in the chest. He gradually got worse until June, 1880, when he was admitted into the Leeds Infirmary. He then complained of loss of appetite, wasting to the extent of twenty pounds in twelve months, occasional vomiting, pain in the right side and between the shoulders. Complete dulness on percussion was found in both axillary regions, where also respiratory sounds, fremitus, and resonance were greatly diminished or absent. The dulness was of irregular outline, but sharply defined. On exploratory puncture in the left axilla a brown greasy fluid (exhibited) was obtained. It was composed of red blood-cells, frayed at their edges, and plates of cholesterin in great abundance in a highly albuminous but not spontaneously coagulating plasma. There appeared at this time to be only a very small quantity of fluid on this side, but on aspirating the right side, in the fourth space, after failing to get anything in the fifth space, two ounces of a dark-red fluid were withdrawn. This also contained cholesterin crystals in abundance. The patient's temperature was normal. There were no signs of disease of other organs. For the next twelve months the left side gave very little trouble; it was aspirated once only (August 10th, 1880) during that time, one ounce of the same kind of fluid, but lighter in colour, being obtained. The right cyst, however, refilled again and again, and the fluid became even more deeply reddened. Aspirations were performed on July 4th (four ounces), August 10th (sixteen ounces), Nov. 22nd (twelve ounces), Dec. 23 (quantity not recorded), March 3rd, 1881 (eighteen ounces), and May 4th. Up to this date his general health had improved; he ate and digested food well, could do light work easily, especially after each operation, but now, remaining in hospital with a view to the complete abolition of the pleural cyst by any possible means, he unfortunately, or, as it may prove, fortunately, quarrelled with one of the nurses, and while in a state of nervous agitation drank some cold water, which caused immediately a feeling of chilliness throughout his whole body. He became feverish and slightly delirious. On June 23rd thirty ounces of fluid, now containing pus cells, though still glittering with cholesterin, were withdrawn from the right side. On July 2nd forty ounces were removed, and on July 10th, as the fluid had again accumulated and the temperature reached 103°, an incision was made at Dr. Churton's request by Mr. W. H. Brown, then house-surgeon, in the right chest, seventh space, posterior axillary line. Thirty-eight ounces of similar fluid (specimen shown) escaped; the temperature fell to 99° within three days, but then again rose to 103°. Dr. Churton then discovered that there was a recent accumulation of fluid upon the left side, and twenty ounces of clear but cholesterin-bearing fluid was therefore withdrawn. The patient did not, however, improve. Pulse 120, respiration 28, temperature 102°. He fancied poison was being given to him by various people, and therefore left the hospital on July 19th. At home, the large drainage-tube in his right chest fell out and he then considerably improved. He continued to take quinine and steel. On Sept. 10th the pulse was 110, respiration 24, and temperature 99° (evening); he was still unable to walk across the room. There was a little clear fluid on left side (explored) with cholesterin; no cholesterin in the pus from the right side. The wound was fistulous and valvular; there were signs of gradual expansion of lung on both sides; a probe passed through the fistula appeared to reach the right lung at once. He went to Bridlington for a month; there he gained six pounds in weight and otherwise improved so greatly that he could walk a mile. He returned on October 17th. Unfortunately the narrow pus-channel became blocked, and he lost ground. On October 27th the following note was made:—Pulse 120, respiration 27, temperature 102°; discharge of pus re-established; he is walking about. The dull area in the left axilla has diminished almost to nothing; a needle passed in at the dullest spot, above the seventh rib, found nothing. This part of the chest does not in him move in respiration; for this reason apparently there is little respiratory murmur in the lower axilla; fremitus and resonance are found here, but are not nearly so distinct as on the front of the chest, where also the breath sounds are, as they have always been, intensified. The right chest is resonant throughout; respiratory sounds, though feeble, are unmistakably heard in the axilla and elsewhere; fremitus and resonance are distinctly present. Two or three ounces of inoffensive pus, free from cholesterin, flow from this side daily. He has some phlegm and occasional expulsive cough, but there are no râles. He has no subjective discomfort. He is going to Scarborough for a month. The author believed that chronic pleurisy had caused the formation of a thick false membrane over a part of the lung on each side; that blood-cells had escaped by diapedesis into the cyst thus formed; that the false membrane had at length undergone fatty degeneration, having as one of its final products cholesterin. Dr. Méhu (Archives Générales de Médecine, Sept. 1881) asserts (p. 277), as the outcome of very numerous observations, that cholesterin in crystals is never met with in fluids which have not been encysted at least six months. In this case it was once found in fluid from the left pleura which had almost certainly not been there many days; moreover, a shred of membrane derived from the pulmonary pleura, which had blocked up the aspirating needle during the withdrawal, was found to consist of small cells and cholesterin crystals in about equal quantity. Although Fraenzel states (Ziemssen's Cyclopædia, vol. iv., p. 670) that when pleurisy appears simultaneously on both sides it is commonly of tubercular nature; and, moreover (p. 614), that relapsing hæmorrhagic pleurisy generally stands in more or less close connexion with the eruption of tubercles; yet, having regard to the fact that the patient had continued in fair health and with a normal temperatnre for a whole year, while frequent aspirations were being practised; that the left chest had become almost normal; that an apparently accidental empyema on the right side had not been fatal; that the part of the right lung formerly compressed had, probably from the suppuration and disintegration of its thick false membrane, been able at length to re-expand to a great extent; and that since the empyema the patient had greatly in every way improved at the seaside once (and might therefore be reasonably expected to do so again)—Dr. Churton did not despair of his ultimate recovery.—The PRESIDENT asked if any physician present had ever seen cholesterin in pleural effusions.—Dr. MACKENZIE had never seen it, and had found commonly hæmorrhagic pleural effusions to be due to cancer.—Dr. D. POWELL asked whether the corpuscles were greatly disintegrated, and held it to be important to ascertain in any case whether pus cells are dead, or whether there is genuine living pus. He did not remember to have met with cholesterin in such cases, and asked whether the cholesterin might not be due to changes in fatty degenerated corpuscles. He had come to look upon fluid stained with blood as not so important as formerly, and recalled many cases where there was no cancer.—Dr. C. T. WILLIAMS had never seen a case with cholesterin in the pleura. What was the condition of the liver in this case? It was contrary to his experience that a lung after being bound down for months should rise again. Another point in diagnosis concerned the temperature in tubercle. He was quite satisfied that it was possible to have formation of tubercle without marked rise of temperature.—Dr. GREEN added his testimony to that of other speakers that pleural effusions may be hæmorrhagic apart from tubercle or cancer.—Dr. COUPLAND, within the past two years, had had two cases of well-marked hæmorrhagic effusion unassociated with either tubercle or cancer. One was the case of an old man the subject of granular kidney, in whom the effusion was of long standing. After aspiration it rapidly reaccumulated, and subsequently became purulent. On the patient's death neither cancer nor tubercle was present, but there was general arterial degeneration. The other case was that of a middle-aged man, who completely recovered after aspiration. In both cases the fluid was highly charged with blood, but in neither were any cholesterin crystals present. Dr. Churton's surmise that the cholesterin came from fatty changes in the false membranes was feasible. In reference to Dr. Powell's remarks, Dr. Coupland submitted that "pus" as such could not be considered to have any vitality.—Mr. BARKER suggested that the blood-stained fluid in Dr. Churton's case might be the consequence of blood-poisoning. He had seen such an occurrence.—Dr. SILVER asserted that in Lancereaux's Atlas there is a figure of a sac rising from the

diaphragm, a long-standing cyst producing cholesterin.—The PRESIDENT was struck by the rapid formation of the cholesterin in the fluid. Surgeons were accustomed to see it in hydroceles, but only in very old-standing cases. Here all the fluid was evacuated, and in a short time the fluid contained cholesterin.—Dr. CHURTON, in reply, said that Fraenzel, who seemed very familiar with hæmorrhagic pleurisy, had found it indicative of various states, and by no means always of cancer. Doubtless in the fluid first withdrawn some, or even perhaps all, the cholesterin might have been derived from the blood-cells, &c., but in the more recent specimens it would seem that it must have been formed in the cyst wall. The liver had been carefully examined; there were no signs of disease of any kind. He thought the case not one of tubercle, because for many months there was no downward progress, and because one lung had practically recovered.

Mr. REEVES read a paper on "Two Cases of Malignant Stricture of the Œsophagus, in which Gastrostomy was performed with special reference to Œsophagostomy in Narrowing of this Tube," and after narrating the two cases, pointed out how having done gastrostomy in deference to the opinion of his colleagues, he should proceed to act in any suitable case of stricture of the œsophagus. He said that the most recent information showed that malignant obstruction was most common in the upper part of the tube, occurring in that situation in about half the cases, and although a much larger number of observations was needed to arrive at a correct conclusion, still there was sufficient justification for the rules he wished to lay down, which were the following:—1. That because of the great mortality of gastrostomy, and also because of the more frequent occurrence of malignant stricture in the upper portion of the tube, œsophagostomy is by far the preferable operation. 2. That even in cases where the stricture is as low down as the manubrium sterni (its depth rarely being very great), œsophagostomy is indicated as a preliminary or exploratory operation, and if it be found that the little finger or sound cannot be got through the narrowing, gastrostomy may be performed. 3. That if it result that the opening in the œsophagus have been made below the stricture (as in most cases would be desired), the operation can be completed by stitching the mucous membrane to the wound-edges, and the stricture may, if thought proper, be dilated through the opening either at the time of operation or subsequently. 4. That if the diseased œsophagus be reached, and no opening into it can be made through healthy walls, then it may be carefully perforated either by the finger or the thermo-cautery. 5. Œsophagotomy has been many times done, and œsophagostomy several times, and never have these operations caused any grave local or general symptoms, or, as operations, led to the death of the patient, whereas gastrostomy has proved most fatal. 6. The operation should be done on the left side of the neck, and a sound should, if possible, be passed—that of Vacca Berlinghiéri being the best. The skin-incision should be rather nearer the mid-line than that for ligature of the common carotid, and should extend from half an inch above the episternal notch to the level of the upper border of the thyroid cartilage. The surgeon should stand on the left of the patient, looking obliquely down and across his or her body. A tube with a funnel-shaped end should be passed and tied in place, and nourishment administered as soon as the tendency to vomit caused by the anæsthetic has passed off. It is necessary to make the opening in the walls with a sharpish stab, to prevent the loose mucous membrane being pushed before the knife. The edges of the wound may be stitched up, and care taken that no food gets into it. 7. The operation should be undertaken before the patient's strength is much exhausted, and even before obstruction is complete, because frequently attempts to swallow produce spasmodic suffocative dyspnœa, as in the first case related. 8. In a severe case of fibrous or of syphilitic stricture in the nuchal or upper thoracic portion of the tube œsophagostomy is indicated, as then the operation might be curative as well as palliative.

Discussion on Mr. Reeves's paper was deferred, Mr. Golding Bird stating that he would raise the question at a future meeting.

Dr. STEPHEN MACKENZIE contributed a paper on a Case of Excessively High Temperatures. The patient was a woman, forty-two years of age, who, thirteen years before, had met with an injury to her leg, which was followed by a persistent ulcer. Necrosed bone had on occasions been removed, and amputation of the limb previously recommended. The patient came under the care of Mr. Rivington in 1878, when the left thigh was amputated at the lower third. She was readmitted February 25th, 1879, for painful affection of the stump, which was red and inflamed. It was thought to be erysipelatous, and she was placed in the isolation ward. She had some rigors, followed by pneumonia at the right base. On March 17th her temperature was found to be 108·8°, and twenty minutes later 111°; a quarter of an hour later 105·8°; on the following day two thermometers, one in each axilla, gave 110·6° and 111°. On many occasions very high temperatures were taken, as high as 108° and 111° between February 20th and April 22nd. On April 21st Mr. Rivington opened the stump antiseptically, and removed a piece of bone. After this, with the exception of the day following the operation, the temperature did not exceed 102°. The case took an ordinary course, and the patient was discharged cured in August. The pain did not at once leave the stump, and convalescence was slow. On October 21st, 1879, the patient was readmitted under Mr. Rivington for pain in the stump; another piece of bone was removed. The stump remained painful, and pain and distension of the abdomen, with vomiting, were complained of. It was for these symptoms and to investigate the peculiar high temperatures that the patient was transferred to Dr. Stephen Mackenzie's care on Dec. 31st, 1879. She was then thin, but not unhealthy looking. The abdomen was distended and tender, but no tumour was detected. The stump was erythematous; the patient frequently vomited. It was elicited that she had taken opium for about twelve years. No important peculiarity other than the above was noticed until January 13th, 1880, when she was stated to have a slight rigor, and the temperature was found to be 109·2°, pulse 72, and the respiration 24. On Jan. 14th the temperatures were at 1 P.M. 180°; 2 P.M., 108·2°; 4 P.M., 107·4°; 5 P.M., 108·5°; 7 P.M., 109·6°; 8 P.M., 106·8°; 9 P.M., 102·6°; 11 P.M., 106·4°; 12 P.M., 113°. On the 15th, 3 A.M., 113°; 4 A.M., 113°; 5 A.M., 111°; 10 A.M., 107·2°; 12 A.M., 111·6°; 2 P.M., 112·2°; 4 P.M., 114°; 6 P.M., 109·2°; 8 P.M., 110·2°; 10 P.M., 113·3°. These are given as examples of the thermometric records. On Jan. 16th the highest temperature was 114·2°; on the 17th, 105·8°; on the 18th, 112°; on the 19th, 106·6°; on the 20th, 108°; on the 21st, 109·2°; on the 22nd, 120·8°, the highest recorded; on the 23rd, 116·6° (over); on the 24th, 111·4°; on the 25th, 111·20°; on the 26th, 116·8°; on the 27th, 110·6°. After this date the temperature was irregular; but did not exceed 103° until April 5th, when 113° was recorded. Ten minutes after this last observation a thermometer in each axilla gave 99° in each. On April 10th, temperature, unwatched, 104°; watched, 99°. On May 11th another high temperature was recorded. When a thermometer was placed in the axilla it registered 110°; taken five minutes afterwards by the nurse who watched her, it was normal. The same thing was repeated many times with two thermometers in the same axilla; considerable differences were observed. From May 24th to July 3rd, when she was discharged, the temperature was about normal. Throughout the time she was under observation her general condition remained much the same; but the vomiting ceased, and the abdominal pain was not complained of. There did not appear any important constitutional disturbance when the high temperatures were recorded; the pulse at such times was usually between 70 and 80, and the respiration between 20 and 30. Discharged September 24th. The patient was readmitted Aug. 16th, 1880, complaining of epigastric pain, abdominal swelling, and vomiting. High temperatures were again absorbed. On Aug. 19th a temperature of 110° was recorded; a fresh thermometer was immediately placed in the axilla and the temperature found to be normal. On Sept. 13th the recording of two thermometers in the same axilla gave 105·5° and 101°. On no occasion when the thermometers were held in the axilla, or the patient closely watched, were the excessively high temperatures observed. The patient has been visited within the last five days; her general condition was the same as when she left the hospital; her temperature was not taken. The author expressed his belief that the temperatures were fictitious, and on the following grounds: 1. The patient was a neurotic woman, and "an educated hospital patient,"—i.e., knew the importance attached to high temperatures. 2. That when on one occasion the temperature was taken simultaneously in mouth, rectum, and axilla, the temperatures in the mouth and axilla corresponded, and were normal, whilst that in the axilla was six degrees higher.

3. That when two thermometers were simultaneously placed in the same axilla there was as much as from 1° to 4½° difference. 4. That there was no correlation between the high temperatures, the pulse, and the respiration. 5. That on no occasion when the thermometer was held in the axilla, or the patient closely watched, was an excessively high temperature observed. When accused subsequently of causing the high thermometric readings, the patient absolutely denied the charge.[1] The author stated that he did not wish to imply that all the recorded cases of similar high temperatures were of the same kind. In fact, that some cases recorded by good observers were believed to be genuine rendered it desirable that a fictitious one should be exposed to put all on their guard in their investigations.—Mr. JOHN TEALE (Scarborough) felt that it was very important for him to be present, because he had the honour of bringing the first case of this kind before the Society in 1875. These cases generally occurred in the hyperæsthetic neurotic female, and the extraordinary up and down oscillations of temperatures were characteristic of them. But there was this great difference between Dr. Mackenzie's and his (Mr. Teale's) case. The patient in the latter case was a strong well-developed lady, who did not know that there was anything extraordinary in her case. There were changes of trained nurses, who looked at the high temperatures with great scepticism, and she was exceedingly ill from serious injuries to the spine. At the same time he did not wonder at the scepticism of physiologists, and every case bearing on the matter was of value, for physiologists should not be called upon to explain such phenomena until they were well established. He would suggest that in another case a small committee to investigate it should be formed. The brother of his patient has promised if any high temperature should recur in his sister's case (for it has recurred more than once) to offer every facility for such a committee to visit the case. Referring to Dr. Little's case, the notes of which Dr. Little had lent him, he remarked that at first it seemed to be one of ordinary fever. There was a history of head injury, which only came out later. On one occasion the temperature reached 133·6°, the pulse being only 84, and there were signs of cerebral disturbance.—Dr. MAHOMED related the particulars of a case which he had observed in Guy's Hospital (his remarks are given on p. 790).—In reply to Dr. Williams, Dr. S. MACKENZIE said that the temperature was taken in sleep sometimes. The temperature varied in different parts of the body, and it seemed to vary at the mere caprice of the patient.—Dr. G. HARLEY thought there was danger lest observers should run from one extreme to the other. Prof. Wunderlich had a patient whose temperature was 112·5° at death, and one hour after 113·8°. This was a puzzle to Dr. Harley, but recalled to his mind a case he had seen at University College Hospital, a girl who died of scarlet fever, and fifteen hours after death the body had an abnormal temperature. When the chest was opened it smoked like a newly killed ox, and the heart felt uncomfortably hot. No doubt it is a knotty point that such extraordinary fluctuations should occur in disease and not in health—e.g., a man may live at a temperature of 40° below zero in the arctic regions, and at 136° at the equator, with hardly any variation beyond a few tenths in his bodily temperature. In the cold stage of ague the temperature is 1° or 2° lower than normal, and this passes in the hot stage to 6° or even 10° higher than natural. The curiosity is that all these cases have been in persons of nervous affection. Goodridge states that in a case of softening of the brain the temperature reached 130° before death, and after death 130°. Dr. Harley believed there was much yet to be made out in this matter.—Mr. RIVINGTON thought that Dr. Mackenzie took a correct view of the case which had previously been under his own care when the temperatures were capricious and fugitive, and always absent during his visit. He suspected his patient of tampering with the stump, and found one day a nest of drainage-tubes in the stump. Later she had great enlargement at the end of the bone, from chronic periostitis, and on a recurrence of similar trouble he removed a piece of bone. She had sickness, and her statements were unreliable, and he came to the conclusion that she was endeavouring to deceive, and handed her over to Dr. Mackenzie, whose evidence goes to show that the temperature was fictitious. But he would be sorry to say that all such cases were so, although it was of great importance to show that one case is.

The Society then adjourned.

[1] The patient has since confessed to Dr. Stephen Mackenzie that she produced the high temperatures by means of poultices, hot bottles, &c.

MEDICAL SOCIETY OF LONDON.

Paralysis of Facial, Spinal Accessory, and Hypoglossal Nerves.—Diphtheritic Paralysis.—Cardiac Aneurism.—Quinine Rash.

AT the meeting on October 31st, the President, Dr. BROADBENT, gave particulars of a case, and showed the patient, a woman suffering from Syphilitic Paralysis of certain Nerves. She has twice been in St. Mary's Hospital. There was a history of syphilis. Six months ago she suffered from severe pain in the head, soon followed by paralysis of the right side of the face and deafness in the right ear. Three weeks later there came on difficulty of swallowing, with regurgitation of fluid through the nose; later still the tongue became affected and soon passed into atrophy of its right half. The affection of the seventh above and the ninth below, together with the paralysis of the soft palate, led to an examination of the neck, as it was inferred that the eighth must be involved; the sterno-mastoid and trapezius were then found to be paralysed and atrophied. At the present time she is quite deaf in the right ear, and the right half of the face is completely paralysed, the affection of the occipito-frontalis and corrugator supercilii, of the orbicularis oculi, and of the muscles of the ala nasi showing that it is the facial nerve or its nucleus which is the seat of the lesion, and not the fibres connecting the nucleus with higher centres. There is no impairment of sensation. She now swallows well, but the voice is husky, and she cannot say many words without taking breath, and there is complete paralysis of the right vocal cord. The right sterno-mastoid and trapezius are practically non-existent; the scapula, and with it the outer end of the clavicle, are drawn up by the levator anguli scapulæ. The right half of the tongue is paralysed and wasted. Such a case is extremely rare in its combination of paralysis, being hitherto unrecorded. The lesion cannot be in the higher centres, or in the tracts descending from them. It must either be in the lower end of the pons or the adjacent part of the medulla oblongata, or outside the nervous axis altogether; and there can be no doubt the latter is the situation, because in the former case there must be a wider affection of the motor and sensory tracts; further, the entire spinal accessory nerve is paralysed, and there is no paralysis of the sixth nerve, the nucleus of which is so closely seated to the facial. Nor was it likely to be some affection of the bone, because of the distance apart of the foramina of exit. The disease, then, is almost certainly close to the surface of the medulla, and probably syphilitic.—In reply to Dr. Day, Dr. BROADBENT said iodide of potassium was given.—Dr. DOWSE said he had never seen a similar case, and agreed in the diagnosis.

Dr. CROCKER showed a case of Progressive Paralysis following a mild attack of Diphtheria. The patient was a boy of five years, attending at the East London Hospital. The paralytic symptoms began three days after the patient had been pronounced convalescent, the primary symptoms, with vomiting, repeated for several days; the voice was noticed to be nasal, and when first seen by Dr. Crocker, in addition to the paralysis of the palate, he was observed to be weak at the knees; a week later this had increased, and the arms were weak, and when shown were quite powerless, but he could stand, though with difficulty; his respiratory muscles were beginning to be affected, his head fell forward, but there was no defect of sensation, sight, or hearing; his pulse was 130, and he could swallow fairly well.—Dr. HALL remarked that paralysis was very apt to follow mild cases of diphtheria.—Dr. DAY also narrated some cases of diphtheritic paralysis similar to that shown by Dr. Crocker. Three children in one family he had seen, and each child recovered.—Dr. BROADBENT alluded to a similar case, a lady who was suddenly attacked when sketching in the south of France. There had been diphtheria in the hotel in which she was staying, and he was inclined to think her attack was of diphtheritic origin.

Dr. CHUETON (Leeds) read notes of a case of true Cardiac Aneurism in a woman forty-nine years of age, who had been lately under his care in the Leeds Infirmary. Two years ago she had had rheumatic fever, which was accompanied by pain in the chest, cough, and shortness of breath. These symptoms had continued, and of late her legs had

begun to swell. There was orthopnœa. The heart's apex beat was in the fifth space, five inches from the mid-sternum; first sound feeble, second well marked. A slight cantering rhythm was distinctly heard, and attributed to reduplication of the first sound. The impulse was heaving and prolonged in spite of the feebleness of the first sound. A day later the impulse had shifted to the sixth space, and it was noted that it was apical only, and very different from the full roll of hypertrophy. The aneurism occupied the anterior part of the left ventricle. The pericardium over it was adherent. The diameter of the wasted portion of the wall was about three inches; it was not sharply defined, and its inner surface was covered by fibrin. The aorta and coronary arteries were atheromatous.

Dr. CHURTON also showed a specimen in which there was a general thinning of the left ventricle, and at the apex the cardiac muscle was thinner than elsewhere. There was also a deposition of clot in what at first sight seemed to be a cavity formed by the thinning of the wall, and which was much more marked in the recent state. It was doubtful, however, upon closer examination, whether the condition could properly be termed aneurismal. The aorta was very atheromatous, although the man was but thirty-seven years of age, and even the smallest branches of the coronary artery were degenerate. — Dr. BROADBENT remarked upon the instructive nature of the cases, and thought the reports might help to lead to a correct diagnosis of their condition; a difficult problem. The second case required more careful examination than he had been able to give to it. He was hardly inclined to admit its aneurismal nature after his short inspection; the clot was certainly ante mortem. The first was a well-marked example of aneurism of the ventricular apex.—Dr. GREEN was inclined to regard the second case as one of ante-mortem clot, and not of aneurism.—Dr. FOWLER said he had met with similar cases to the second one—viz., dilated ventricle secondary to atheroma of the vessels.—Dr. ISAMBARD OWEN said there were five specimens of ventricular aneurism in the museum of St. George's Hospital. In one case there had been no suspicion of cardiac disease during life.—Dr. CHURTON, in reply, thought the reduplication of the first sound due to the retarded emptying of the ventricle.

Dr. CHURTON then read notes of a case of Quinine Rash of a roseolous nature, and followed by free and general desquamation, on which Mr. PYE remarked that after an attack of ague he had taken himself twelve grains of quinine at a dose for a long period, and he certainly peeled as Dr. Churton's patient had done. He had had no rash, but the desquamation was complete, and he attributed it to his high temperature rather than to the quinine.—Dr. ROUTH related a similar case, in which there had been desquamation, though not after scarlet fever, or after quinine. Forty years' experience had not led him to believe that quinine would produce free desquamation.—Dr. THOROWGOOD mentioned a case of quinine rash.—Dr. R. CROCKER said the definite rash after each administration (in Dr. Churton's case) looked as if the quinine was directly responsible for the roseola.—Dr. CHURTON replied, and the meeting adjourned.

Reviews and Notices of Books.

A Treatise on Diseases of the Joints. By RICHARD BARWELL, F.R.C.S., Senior Surgeon and Lecturer on Surgery at Charing-cross Hospital. Second Edition, revised and much enlarged. London: Macmillan and Co. 1881.

DURING the twenty years that have elapsed since the publication of the first edition of Mr. Barwell's work on Diseases of the Joints, his own experience has so much increased, and other observers have devoted so much attention to this department of study, that Mr. Barwell has found it necessary to practically rewrite the whole of the book. The volume has greatly grown in bulk, and now consists of nearly 700 large octavo pages. Throughout it bears evidence of great industry and labour in its preparation; and as Mr. Barwell is by no means a slave of tradition, but chooses rather to study disease originally and from an independent standpoint, even those who see most cause to disagree with his conclusions and teachings will find much valuable information and reasoning in these pages.

In the broader outlines the work in this edition has not been altered in character. The same distinction is attempted to be drawn between arthritic inflammations commencing in the synovial membrane and in the articulated ends of bones, although why the term "synovitis" should be applied to an affection of *all* the structures of a joint we are at a loss to understand. The style is in some places involved, especially in the chapters on Pathology; while the sections on Treatment are a little disappointing in clearness and fulness. The aim of the author has been analytical, and he has attempted to break up what he believes to be groups of affections into their individual entities. The unusually free use made of foot-notes, many of which are hardly necessary, and others of which would have been conveniently incorporated in the text, is annoying to the reader, especially as many are so trivial in character. We are also surprised to find that, though Mr. Barwell quotes and refers often to German writers, he makes very few and scant references to British, and especially to contemporary British, and American surgeons and pathologists.

Among the forms of synovitis described is one called the "dry," in which the exudation is presumed to be fibrinous and to coagulate at once, but the description leaves us in doubt as to whether there is any ground at all for supposing that such an affection exists, as no pathological proof is offered, and the symptoms named are quite compatible with other explanations. In all cases of acute synovitis where the inflammation is "sufficient to cause considerable secretion into the joint, producing marked fulness of its sac," Mr. Barwell directs that the joint should be punctured with Dieulafoy's aspirator, or subcutaneously incised with a tenotome; and he lays great stress upon the early and thorough relief of tension in such cases. It is impossible to feel quite satisfied with the definition or explanation of the term "struma" given in connexion with the treatment of strumous synovitis: "Struma is not a disease, but a condition of bad nutrition, which marks itself in the aspect in two ways: either by an excessive delicacy, thinness, and sharp-cut outline of connective tissues, with clearness and transparency of skin; or by a gross, coarse, ill-concocted condition of the same parts, which therefore are large, blunt-edged, ill-defined, and coarse." Mr. Barwell does not support the view held by Mr. Croft that tubercle in the form of grey granulations plays a very important part in the production of osseous joint disease; but, on the other hand, he asserts the existence of an etiological connexion between phimosis and acute hip disease, for in 100 consecutive cases of this malady in boys under ten years of age he found distinct phimosis in 83, and a normal prepuce in 6 only. As, however, during this same period Mr. Barwell saw the same joint disease in as many as 76 girls, and as he fails to state in what percentage of all boys under ten he finds more or less phimosis, we cannot unreservedly accept the facts on which he bases his theory. The theory of the connexion is that phimosis leads to frequent erection, and that to irritability and irritation of the lumbar spinal cord, "That from this part the various nerves of the pelvis and lower limb are given off, that the influence of spinal irritation on the trophic nerves is well known, and that just at this particular period large trophic changes are in progress about the hip-joint." This is very ingenious, but it fails to explain why only one hip-joint is usually affected in such cases, nor is evidence forthcoming of parallel trophic influence elsewhere.

What to do in Cases of Poisoning. By WILLIAM MURRELL, M.D., M.R.C.P. 16mo. London: H. K. Lewis. 1881.

THE object of Dr. Murrell's tiny, but useful, volume is "to give straightforward directions for the treatment of the commoner poisons"—i.e., for the treatment of cases of poisoning by them. This he has done in a clear,

concise manner, and in a form calculated to be of real service to practitioners. The points of general management to be adopted in each case are given in separate paragraphs, and directions are supplied for antidotal treatment which embody the latest knowledge on the subject of the antagonism of drugs. These directions are, as the treatment should be, definite and decided. The only loose statement we have met with is the direction to give of apomorphia as an emetic, "gr. $\frac{1}{10}$ to gr. $\frac{1}{5}$, by mouth or hypodermically." The dose, according to the method of administration, should be more clearly defined. It is indeed doubtful whether apomorphia should ever be given by the mouth to produce vomiting, since other emetics given thus are more efficient, while as a hypodermic emetic apomorphia is invaluable; and, as Dr. Gee long ago showed, perfectly safe. We do not think that the form chosen for Dr. Murrell's little book is the most useful. It should have been in paper cover, and a little larger page (with as much on every page as possible), so as to just fit into the pocket of the Visiting List, where it ought always to be, or it will not be "to hand" when wanted, since practitioners are often summoned to cases of poisoning when on their rounds.

A Dictionary of Chemistry and the Allied Branches of other Sciences. By HENRY WATTS, B.A., F.R.S., F.C.S., Editor of "The Journal of the Chemical Society," assisted by eminent Contributors. Third Supplement, Part II. London: Longmans and Co. 1881.

THIS volume completes the third supplement of the vast work which we owe to the profound learning and untiring energy of Mr. Watts. The dictionary now consists of nine thick and closely printed volumes, and it is not too much to say of it that it is one of the most valuable scientific works which has ever appeared in England or abroad. The present volume consists of over thirteen hundred pages, of which not less than eight-ninths are from Mr. Watts' own pen. He is equally at home in all branches of chemical science, in chemical physics as much as in organic chemistry, and his power of condensation is so great and his style so lucid that the chemist has reason to bless him at every page. As examples, we may point to the articles on Heat, on Light, and on Iron. Let the reader turn to any one of these, and consider what the labour must have been of compiling and arranging so many tables, and compressing so vast a mass of detailed information into so small a space.

Of the articles contributed to the present volume by outsiders we may notice as especially excellent those of Professor Carey Foster on Thermo-dynamics, of Professor Armstrong on Naphthaline, of Professor Thorpe on Specific Volumes, of Mr. Rodwell on Volcanic Products, and of Mr. Walter Flight on Meteorites.

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

A COUNCIL meeting of this Association was held at their rooms, 3, Bolt-court, Fleet-street, on Tuesday, November 1st, Dr. J. Rogers in the chair, when, *inter alia*, it was unanimously resolved that a letter be sent to the Local Government Board asking that the provisions of their circular letter, and subsequent general order, issued July, 1881, in reference to non-resident district medical officers in the metropolis, should be extended to provincial towns and rural districts; and that in future appointments of such non-resident medical officers, if, on the report of the guardians appointing and the inspector of the district, it appeared that the reasonable requirements of the sick poor would be fairly met, such appointments should not, as heretofore, be subject to annual confirmation. It was also resolved that a letter should be forwarded to the Right Hon. the Earl of Shaftesbury, Chairman of the Commissioners in Lunacy, complaining of the ungenerous reference to Poor-law Medical Officers on page 121 of the last report of the Commissioners. It was also resolved that a letter be forwarded to the editor of the *Morning Post*, traversing the statement made by an anonymous correspondent in their issue of the 5th ult., which statement reflected most seriously and insultingly on the *bona fides* of the Poor-law medical service, in alleging that they were in the habit of performing capital operations unnecessarily solely for the fees paid for the same. It was finally resolved that at an early date an effort would be made to reach the student class, with the view to educate them into the positive refusal to accept unpaid appointments, or badly remunerated Poor-law medical offices.

THE PORTABILITY OF DRUGS IN FIELD SERVICE.

To the Editor of THE LANCET.

SIR,—I have just read a letter in THE LANCET of Oct. 1st from Surgeon-Major Evatt, A.M.D., and fully endorse everything he says as to the absolute necessity of reducing the bulk of drugs in field service. I have not unfrequently at such times been without medicines owing to the delay and difficulty of carriage. Since my retirement from the service I have been engaged in private practice, and now frequently prescribe (being more palatable than medicines as generally dispensed) McKesson and Robbins' concentrated preparations of the various alkaloids and other drugs of the Pharmacopœia, put up in ovoid capsuled pills; also the Wyeth's compressed lenticular tablets of such chemical salts as chlorate of potash, muriate of ammonia, bicarbonate of soda, &c. Almost, if not all, medicines can be obtained in this concentrated form; and, what is very important, they are easily soluble, being covered with transparent gelatine, which seals and protects the drugs from oxidation or other changes, and renders them, I believe, impervious to climatic influences; the pills being ovoid-shaped are more easily swallowed than the old round pill. I most strongly recommend the said preparations to the notice of the military medical authorities; they will, I think, be found to meet exactly the requirements so clearly pointed out by Surgeon-Major Evatt, and solve the problem of reducing the bulk and rendering drugs easily portable. I think I may safely estimate that a pair of ordinary sized saddle-bags would contain a fully equipped dispensary, sufficient to meet the medical requirements of a thousand men for a three months' campaign—even including anæsthetics, to be carried in metallic flasks, fitted with close-fitting screwed tops, instead of the glass bottles at present in use.

I am, Sir, yours, &c.,
G. P. M. WOODWARD, M.D., F.R.C.S.I.,
Deputy Surgeon-General (retired).

Herne-hill, Oct. 1881.

To the Editor of THE LANCET.

SIR,—Referring to the letter of Dr. Evatt, in your issue of Oct. 1st, as to the possibility of having medicines compressed into such small bulk as to be readily carried long distances without much trouble from breakage &c., also in such formulæ as would be most useful in emergencies, and always reliable, I think the difficulty has been overcome by the process of John Wyeth and Bros., Philadelphia, whose preparations of compressed powders are most elegant and reliable; and neither time nor weather seems to affect their medicinal virtues. The compressed powders made by the special process of this firm answer all the purposes that either mixtures or tinctures do in general practice, and the bulk is so much reduced that several hundred doses can readily be carried in an ordinary pocket-case. For several years I have used these compressed powders, and in every case I have found them to be as represented. I am quite sure they would be most useful in campaigns such as Dr. Evatt speaks of, where transport of supplies is difficult. Large quantities of these compressed powders could most easily be carried, and the office of compounder almost dispensed with. Wyeth and Bros. put up any formula in the shape of compressed powders which may be sent them; so that if an official formula were constructed they could supply it in any quantity.

I am, Sir, yours truly,
J. L. NIVEN, M.B.T.C.D., &c.

London, Ontario, October 15th, 1881.

THE LANCET.

LONDON: SATURDAY, NOVEMBER 5, 1881.

THE nineteenth century is nothing if it is not critical. Nothing escapes. The most precious beliefs and the most benevolent institutions have to undergo the ordeal. It would be as idle as it would be foolish to complain of this. There is evil in it, but there is more good than evil; and the good will survive the evil. Amongst the things that have not escaped criticism are hospitals and similar institutions, that have for their principal object the relief and mitigation of physical suffering. Till a few years ago the hospital was considered so benevolent an institution as to be almost beyond the pale of criticism. It was a crowning testimony to the spirit of Christianity as in sympathy with the weakest and the poorest and the most pained. In the old civilisations we searched in vain for a hospital in our sense of the word. It was a thing

"Above all Greek, above all Roman fame."

But a good many things have happened since then. The Charity Organisation Society, the Social Science Association, and a variety of other bodies, have come into existence, not so much for the purpose of charity as of criticism, and amongst all the subjects which they choose for the display of their powers there is none more frequently chosen than the hospital. Already some of the critics seem to be almost rejoicing over the fact that they have supplied the benevolent, who were never too numerous, with reasons for buttoning up their pockets and withholding or reducing their subscriptions, and the selfish and luxurious with excuses for refusing help to the perplexed governors of hospitals. We have already protested that we accept criticism at least as being inevitable, albeit we think that in this case it has gone quite far enough, and that it devolves on the critics without delay to say that, in spite of all their strictures on hospital administration they continue to believe in two or three things. First, in the existence of an enormous mass of physical disease associated with and intensified by scanty means; secondly, that it is one of the prime duties and pleasures of healthy and comfortable people to make generous contributions to hospitals where the sick are rested and restored; and, thirdly, that in discharging this duty comfortable people are also maintaining institutions which have done more than any others to increase medical skill and knowledge by which when they come to be on a sick bed their own life may be saved. The hospital has been attacked as if it were the very fountain of pauperism, demoralising one out of four people in the community, or at least in the metropolis. It has been assailed as if it were a dram-shop, contaminating all who came within its influence. We repeat that we accept criticism, but in this case we think it has been overdone and misplaced. Hospitals have been taken first instead of last, and statements of very doubtful accuracy have been repeated by speakers who might have contributed original data to a discussion that is now far more remarkable for the harm that it has inflicted on hospitals than for the good it has done the poor.

The Hospital Sunday Fund has a grave responsibility in this matter. There are some large hospitals altogether outside of its jurisdiction—namely, Guy's, St. Thomas's, and St. Bartholomew's. It has no control over them, and yet in connexion with these institutions, more than others, delicate and difficult questions of administration have arisen, and grave errors and faults have come more or less to light. With such resources as these endowed hospitals have, or had, they should have been models for imitation. Instead of this they have been rather beacons for warning. For the correction of their abuses, and for the best utilisation of their funds, we are reluctantly compelled to admit that nothing less will suffice than some strong Parliamentary action. So far we are agreed with those who wish to see a Royal Commission appointed. But we cannot agree with them in wishing to see our voluntarily supported charities turned practically into workhouses and their inmates into paupers. There is a good deal of abuse in the Out-patient Department — though even this has been exaggerated—and we are most anxious for its correction; but there has been none that would justify the wholesale conversion of our noblest charities into State hospitals. The internal ministrations, though not faultless, are simply beautiful and grand as proceeding from private and untaxed benevolence. The Metropolitan Hospital Sunday Fund owes it to the hospitals themselves to be a little more critical. By doing so it will save them from more unfriendly judges. It represents, as no other body does, the charitable public. It has materials for judgment which no other body has. It has accumulated data from which all the virtues and all the faults of any given institution in London may be inferred. The data of the Hospital Sunday Fund show that for a sum of from £80 to £100 a year a bed can be maintained in a London hospital. Can any use of money, in any state of society or civilisation, be more worthy than this? There are institutions which seem to waste their funds. What one hospital finds enough for a patient another almost doubles. These are errors which should be rectified without State interference. They have been already mooted at the Hospital Sunday Fund, but they have not been disposed of. The Council of the Fund has not yet realised all its duties to the hospitals. We think the Fund will see its responsibility to go further, and do more to induce hospitals to perfect their administration, and so maintain their incomparable claim upon the generous and the good and to be let alone by Parliament, without whose permission some people would not have us "give even a cup of cold water."

No question in the political and international relations of Great Britain presses with greater weight on the moral sense of the community than does the trade in opium between India and China: a traffic monopolised by the Government, forced upon the Chinese at the point of the sword, and maintained in spite of their continued protests; a traffic which has for its immediate consequence the demoralisation and ruin of a large number of the inhabitants of the protesting country, and from which one-sixth of the revenue of India is derived. Government after Government profess

their abhorrence of it, but protest that their hands are tied by the state of the finances of India; while the keepers of the national conscience, ministers of religion of all denominations, and other individuals whose lives are devoted to philanthropy, from time to time record their protest, and endeavour to rouse a keener sense of the disgrace in the minds of the inhabitants of this country. Such a protest was recorded by the crowded meeting held recently at Exeter Hall, in which the highest dignitaries of the Established Church, of the Roman Catholic, Presbyterian, and Wesleyan denominations, found common ground in deprecating a system so indefensible. Opportunely for the correct estimation of the extent of the evil, a report has been published at Shanghai, by order of the Inspector-General of Customs, regarding the relation of the foreign drug supply to the national custom of opium-smoking, and the facts there stated deserve the most careful attention.

The report embraces the replies to a circular sent to the commissioners in charge at twenty treaty ports of China to obtain information of the amount of imported opium and of the revenue upon it, the amount (so far as it can be ascertained) of native-grown opium, the retail price of each variety, the quantity consumed daily by the smokers, and the length of time before a smoker becomes enslaved. The answers to this circular are given in full, and are also arranged in a tabular form; they are summarised by Mr. ROBERT HART, the Inspector-General of Customs at Pekin. The annual importation of foreign opium, most of which comes from India, amounts to the enormous quantity of 13,000,000 lb. avoirdupois, which yields nearly 9,000,000 lb. of prepared opium fit for use, and which, after paying duty, sells for £16,800,000 sterling. The amount of imported opium consumed daily costs the consumers about £46,000. The quantity which suffices an average smoker per day costs 10½*d.*, and from this it is calculated that there are about one million smokers of foreign opium in China, but since the population of China is between three and four hundred millions, the consumers of foreign opium only amount to 3½ per 1000 of the population. In addition to the foreign drug, a large amount of opium is produced and consumed in China. It is extremely difficult to form an estimate of this quantity, but Mr. HART considers that there is ground for believing that it does not exceed the total quantity which is imported. The native product sells for only one-half the price of the imported opium, but the total sum spent by China on this "luxury" is not less than £25,000,000 sterling every year, and the quantity of unprepared opium which this represents is very nearly 12,000 tons.

The estimates contained in the report are evidently prepared with great care, and in every case the facts have been under rather than over-stated. The proportion of opium-smokers to the entire population is small; but this, which is due to the vastness of the population of China, does not in the least lessen the stupendous fact that we supply with an enslaving drug no less than one million persons in China alone. An attempt has been made in an article in *The Times* to minimise the evil by a misstatement, which needs to be pointed out. Taking Mr. HART'S figures, the assertion is made, as if from his report, that the "larger proportion" of the two million smokers consume the native drug. The truth is that Mr. HART has obtained the estimate of two millions by doubling the number of consumers of imported opium, and if the consumers of the Chinese drug exceed in number those of foreign opium, then the total smokers in China proportionally exceed two millions, and the smoking ratio of the population is correspondingly increased. Thus the facts with which we as a nation have to do are clear and absolute, affected by neither the fact nor the amount of native grown opium. Moreover, the annual importation has increased considerably during the last fifteen years. The report gives the variations in the annual importation at Hong Kong only, but we may probably take this as a fair example of the variations at the other ports. The amount imported in 1879 was greater than had ever before been reached, and if we compare the average of the five years ending 1869 with that of the last five years, the latter shows an increase over the former of 25 per cent. The small proportion of smokers to the total population affords no comfort to the Chinese, who have studied the question. "They do not find," writes Mr. HART, "in either the revenue produced, or the statistical demonstration of its percentage innocuousness, any sufficient reason for welcoming the growth of the trade, or for desisting from the attempt to check the consumption of opium."

One of the questions on which information was sought in the circular was the duration of smoking in different cases before the smoker was so much enslaved that it was impossible for him to give up the habit. The time is variously given as from three months to ten years. It is noteworthy that several reporters state that a longer term is required to enslave with native opium than with the imported drug, the latter being the more agreeable to the smoker, and more fatally potent. Much seems to depend on the individual constitution. Weakly persons are more readily enslaved than the strong. The Commissioner at Cheefoo states that "there may be rare instances of a powerful man smoking for four or five years, and then being able to desist, but the general opinion seems to be that the man who has smoked for two years becomes a slave to the drug, and the weakly-constituted person cannot give up after six months' indulgence." On this point almost all the reporters are agreed. Many of the informants laid great stress on regularity or irregularity of the daily hours for indulging in the habit. "If the same times be observed, a beginner will develop into a habitual smoker in about three or four months; but if, on the other hand, he smokes daily at uncertain hours, he may smoke for years, and even then be able to give up the habit without effort or inconvenience."

An important element in the practical problem presented by the opium traffic is whether the arrest of the supply of opium to China would materially lessen the amount of opium-smoking. It is maintained, in the article to which we have referred, that the increasing cultivation of the poppy in China would rapidly compensate for the arrest of the foreign supply, and he insinuates that the connivance of the Chinese Government at the home production of opium proves the insincerity of its alleged desire to lessen opium-smoking, and that it desires the prohibition of the traffic for purely fiscal reasons. The facts which are embodied in the Inspector-General's return give no support to this opinion. The Government derive a considerable revenue from the duty on the imported opium, and scarcely

any from that which is home-grown. The cultivation is theoretically prohibited, but the prohibition is as a rule neither enforced nor regarded. Can we wonder at this? "What," the Chinese Government may reasonably ask, "would be the practical use of attempting to arrest the native growth of opium, or to lessen its consumption, when you force us to receive six thousand tons a year?" But the prohibition is not allowed to remain entirely a dead letter, for from Newchwang it is reported that the diminution in the culture, due in part to its prohibition by the district authorities, has lessened the production to one-third. By a prohibitory stipulation in the recent treaty with America the Chinese Government has conclusively shown that its wishes are unchanged, and has effected an indirect but not less forcible protest against the traffic in which we are engaged.

In truth, every attempt to minimise the evil or to palliate the offence against international morality which is involved in the compulsory opium traffic only serves to bring its ugly features into bolder relief, and its abolition should be, as it practically is, a question only of Indian economics. That the monopoly is in the hands of Government is probably, as Cardinal MANNING urged, a circumstance which affords ground for hope rather than for lamentation. We confess, however, that the hope thus suggested would increase if there were signs of an endeavour rather to lessen than to augment the production. But the practical difficulties of the problem are immense. One speaker proposed that the deficiency to the Indian revenue which would result from the abolition of the traffic should be made up by English taxpayers, but the reflection that this would mean a permanent addition of sixpence to the income-tax is sufficient to show that it is outside the sphere of practical politics. Moreover, the growth of opium in India represents to the people of India a money interest far greater than is represented by the fiscal returns. But the task will have some day to be undertaken, and the difficulties will increase instead of lessen, with every year's delay. At the thought of the effect of a sudden abolition of the traffic a statesman may well recoil, but surely that is no reason why he should be content to fold his hands and contemplate the growing enormity with placidity. The public would be satisfied if they saw that steps were being taken which would in the course of years gradually lessen and ultimately extinguish so discreditable a traffic.

DR. RUSSELL REYNOLDS has, it would seem, yielded to the remonstrance of some critic of his recent address on "Specialism in Medicine," and substituted for the sentence "Specialisms have so limited an area that it is quite impossible for any man, who is restricted to any one of them, to make an income, unless he does so by inducing his patients to pay him needless visits," the sentence, "It is difficult for a man whose practice is restricted to any one of them to make a large income." The correction is evidently made at the bidding of a tender conscience pained by the fear of having given utterance to a sentiment scarcely complimentary, and, perhaps, a little unkind to specialists. We venture to think that if Dr. RUSSELL REYNOLDS had re-read his address before making this concession he would not have made it. What he first said was strictly true from the stand-point and in the sense of his argument. He was denouncing the evil of specialism in medicine as a science—not in its practice as an art,—and upon that basis it was not only logical but right and expedient to point out that the specialist, properly so called, is in perpetual jeopardy of being induced to see all cases in the light of his special gift and opportunity, and to magnify the one while he makes the most of the other. It must have occurred to the hearers and readers of Dr. RUSSELL REYNOLDS's address that even honest and well-meaning men may readily fall into this double error if they are specialists and nothing more. We hold that it was important to point this out, and we read the original sentence in the address with great satisfaction.

Now, however, Dr. RUSSELL REYNOLDS has taken up a position which is wholly untenable. He seems to have forgotten that he was speaking *more* of science than of practice, and that his references to faults in practice were rather introduced by way of illustration than as cardinal points of his argument; and in a tone almost apologetic he explains that "it is difficult for a man whose *practice* is restricted to any one of these specialties to make a large income." We are forced to join issue. This is not the fact. The specialist takes a short cut to success and makes a fortune, while the "all round" physician or surgeon has to wait. The matter is one of common observation, and it is obvious that it must be so. The whole spirit of the times is in favour of specialism. The first question asked by a sufferer from any disease is, "Who has given it his attention and made a specialty of it?" The specialist may burst on the social and professional world like a rocket. He may be unknown one year and the rage the next; whereas the general physician or surgeon can only win the confidence of the public and secure the respect of his brethren by a slowly progressive and detailed proof of his ability. It is almost waste of time and space to point this out, so well is it recognised, so universally is it known. For every "all round" physician who finds it possible, towards the close of a long career, "to make a large income," there must be half a score of specialists to whom success comes early and in no niggardly mood. Herein lies the peril of specialism, and it is against the allurement of speedy and great success the student needs to be warned. It is not in the interests of science or the highest probity in practice that specialists should be encouraged by the profession. Ours is not a money-getting way of life, and it is most undesirable that it should be so regarded by the young men who enter it. We have again and again protested that the medical student ought to be able to command sufficient resources to enable him at least "to live" independently of his receipts from practice. Unless he can do this it is hardly possible that he should escape the pressure which drives men into difficulties, and induces or compels them to resort to modes of practice which are not entirely satisfactory. If the thought of "fees" or "income" forces itself upon the practitioner in his work he can scarcely fail to go wrong. The specialist has, so to say, the opportunity always at hand of exerting a mischievous influence over his patients. They have come to him, not merely because they are out of health and require advice, but because they, or their friends on their behalf, are already under the coercive power of a belief that the disease for which the specialist is celebrated

exists, and that *he* is the person to treat it. They come prepared, and *expecting*, to be told that they will need to come again and again, until, by dint of his special skill, benefit is conferred on them.

When a patient goes to a practitioner who is not a specialist he hopes to hear there is not much the matter with him, and is disinclined to repeat his visit. The general physician or surgeon has this feeling in the mind of his patient against him, whereas the mood of the man or woman who goes to a specialist is one of preparedness to be subject to a specially active and prolonged course of treatment, or if there be a hope of prompt cure there is an expectancy of having to pay largely for the boon. All this tells in favour of the specialist, and, so far from its being true that he finds it "difficult" to make a large income, we do not hesitate to affirm that specialists find it easy to acquire wealth, and in no inconsiderable proportion of instances they succeed quickly, whereas, as "all round" physicians or surgeons, they would not, perhaps, have succeeded at all.

THE public attention has been directed, by a correspondence in *The Times*, to recent researches of M. LACERDA of Brazil, on the treatment of snake-bite, and some particulars regarding his results may interest our readers. Continuing the investigations which have been from time to time noticed in our columns, M. LACERDA tested the influence of perchloride of iron, borax, acid nitrate of mercury, tannin, and other chemical substances, on the local and general action of the serpent poison (of bothrops), but without obtaining any satisfactory effect. He then tried permanganate of potash, and describes the results as "truly astonishing." The method adopted was to collect the poison upon cotton, and to dilute it with a litle distilled water—about eight grammes of poison to ten of water. A syringe was then filled with this solution, and half the contents were injected into the cellular tissue of the thigh or groin of a dog. In one or two minutes, sometimes later, an equal quantity of a 1 per cent. solution of permanganate of potash was injected into the same place. The following day the dog presented no indication of the local injury, or only a slight swelling around the puncture, without irritation or infiltration. The same poison injected without the antidote into other dogs always produced extensive local swelling and irritation, which progressed to an abscess and caused loss of substance. This result led to a trial of the action of permanganate of potash when the poison was injected into a vein, and in this case also the agent is said to have succeeded perfectly. Thirty experiments were made, and in only two cases did the antidote fail. The failure in these cases is ascribed either to the animal being of feeble strength, or to an undue delay before the permanganate was injected. In some experiments the injection was made of half the contents of a syringe which had been filled with ten grammes of water and the poison from twelve or fifteen bites of the serpent. Half a minute later two cubic centimetres of the 1 per cent. solution of permanganate were injected. Except transient tremor, and sometimes acceleration of the heart's action, no disturbance could be recognised. In other cases the poison was injected, and the symptoms of its toxic action were waited for. When the pupils had become widely dilated, the respiratory and cardiac movements disturbed, the limbs contracted, and the bladder and bowel emptied, two or three centimetres of the solution were injected. At the end of two, three, or five minutes the symptoms passed away, and merely general prostration remained, which lasted for fifteen or twenty-five minutes. The animal could then walk or run, and presented in every way a normal aspect. Other dogs injected with the same dose of the poison, but to which no antidote was administered, died more or less quickly. M. LACERDA is inclined to regard the permanganate as a true antidote to snake poison; but, as a letter to *The Times* from "F.R.C.S." opportunely points out, this conclusion cannot be accepted without considerable reserve, since permanganate of potash has been before tried and found wanting. Sir JOSEPH FAYRER and Dr. BRUNTON found that its injection made little difference in the rapidity of the death of animals bitten, although it had the power of destroying the virulence of the poison if mixed with it outside the body. They almost doubt the possibility of the efficiency of any chemical antidote when the poison is once circulating in the blood. It is, however, probable that antidotes, if they exist, are not equally efficacious for all serpent poisons, and the careful observations of LACERDA justify the hope that for one at least he has discovered an antidote which is effective.

Annotations.

"Ne quid nimis."

TYPHOID FEVER IN LONDON.

SOME idea may be gained of the extent and nature of the prevailing occurrence of typhoid fever in the metropolis from the following returns with which we have been favoured. Although they represent but a few institutions, yet these returns show that the cases are not confined to any particular district, but are distributed throughout the metropolitan area, and they also point to a diminution in the number of cases in some hospitals. We hope to be able next week to add to this information, so as to frame an adequate idea of the prevalence of this disease in London, to an extent certainly unusual even at this season of the year. In the week ending October 29th there were admitted into Stockwell Fever Hospital 11 cases of this disease, 36 remaining in the hospital from the previous weeks; one was discharged recovered and 3 died, leaving 43 cases under treatment at the close of the week. At Homerton Fever Hospital during the same period there were admitted 25 cases, 74 remaining over from the previous week; 10 were discharged recovered, 2 died, leaving 87 in the hospital on October 29th. At St. Thomas's Hospital on Nov. 1st there were 36 cases, the majority being convalescent. Forty-five cases were admitted during the last month, for the most part mild and uncomplicated, and presenting well-marked eruptions. Two died from very high fever alone, one from exceedingly prolonged, though not very high fever, 2 from perforation of the bowel, and one from hæmorrhage. The majority of the cases were males. In St. Bartholomew's Hospital there are now 73 patients; 37 of these being males. In the Middlesex Hospital on November 1st there were 11 cases, 6 males and 5 females, but during the previous month as many as 20 cases were in the wards at one time. The cases have been marked by an unusual tendency to hæmorrhage, even in cases which otherwise would not have been thought severe. Out of a total of 34 cases admitted, there have been 4 deaths; 2 from perforation of the bowel, and 2 from hæmorrhage. A remarkable absence of delirium has been noticed, and is attributed to the treatment by cold

bathing, which is generally adopted at this hospital. In Charing-cross Hospital, at the above date, there were 9 cases under treatment: 5 males and 4 females, all of severe type, and one complicated with extensive ulceration of the fauces and larynx with formation of a diphtheritic membrane. In King's College Hospital there are at present 6 patients suffering from typhoid fever; 4 of whom are men and 2 women. In none of the cases have any particular complications occurred, and they are all progressing favourably.

"MORAL INSANITY."

WHETHER or not it would be expedient in the interests of society to recognise "moral insanity" may be a debatable question, but we should have thought that no question could have arisen in the mind of any judge in this land, and at this period, as to the justice of giving weight to the existence of "moral insanity" in the case of an offender who had on more than one occasion previous to the commission of a great crime been actually under certificate as a lunatic. The case of Dr. William Storey, who has been sentenced to five years' penal servitude for a clumsy attempt to set his house on fire, is a most painful one. The prisoner is sixty-eight years of age, and has been in practice as a physician forty-four years. He has been in an asylum, and under the care of attendants in his own house. It is monstrous to treat a person of this description as a sane criminal. The time has come to speak out plainly on this point. Because a policeman thinks a man sane, a judge believes him to be so, in spite of medical testimony to the contrary. We must be excused for saying that Dr. Winslow—if he is correctly reported—made a grave mistake in the case, and is in part responsible for the result. He is said to have stated in court that whereas the prisoner had been distinctly insane on more than one occasion, he was "perfectly sane between his attacks." If Dr. Storey suffered from "moral insanity" at all, this could only be by "dissolution," the result of brain disease, which could not possibly have left its subject sane intervals. "Moral insanity" is one of those diseases which are either arrested or progress steadily. It does not admit of temporary cure. Its victim is never "perfectly sane in the intervals of his attacks," because the organic mischief done is irreparable. Temporary recovery may happen in other forms of mental disease, but clearly not in "moral insanity" properly so called and as elucidated by the recent discoveries of science, with which Dr. Winslow is of course familiar. We think the case is one to which the attention of the Home Secretary ought to be directed. The medical evidence went clearly to show that Dr. Storey needs to be cared for in an asylum, not incarcerated in a prison.

THE SCARLET FEVER EPIDEMIC IN HULL.

THE present almost unprecedented fatality of scarlet fever in Hull once more raises a question which is of primary importance in the organisation of successful sanitary administration. Is Hull only to be pitied for such an outbreak, or are the sanitary authorities in some measure, and if so, to what extent, responsible for this exceptional fatality? We do not yet know much as to the conditions that determine the varied intensity of the mortality arising from scarlet fever, which disease may be said to be constantly present in all large town populations. Among the twenty large English towns, the mortality statistics of most of which have now been regularly published for more than fifteen years, scarcely a single town has escaped scarlet fever fatality for more than a few weeks in succession throughout this period. Yet it is, fortunately, very seldom that the disease assumes the intensity of fatality which it is now exhibiting in Hull. The mortality statistics of our large towns show a general decline in the fatality of these recurring scarlet-fever epidemics—a result which it seems fair to attribute partly to improving sanitary conditions, and partly to the adoption of special measures for isolation of patients. The present epidemic in Hull forms a notable exception to this general decline, as it is markedly more fatal than either of the two preceding ones in 1870 or 1874–5. Since the beginning of July last no fewer than 357 deaths from scarlet fever have been registered within the borough, and they have averaged 35 in the past three weeks. It is impossible to avoid the conclusion that the sanitary condition and administration of the town must, to some extent, be responsible for this exceptional mortality, especially when the excessive zymotic fatality in the town during 1880, due to measles, whooping-cough, and infantile diarrhœa, is borne in mind. There does not, moreover, appear to have been any serious attempt to check the present epidemic of scarlet fever in Hull by systematic isolation.

AMBULANCES IN CIVIL PRACTICE.

MR. REGINALD HARRISON devoted a part of a recent address at the Liverpool Medical Institution to pointing out the great need there is for some system by which sufferers from accidents and urgent illness may be removed with ease and safety to a hospital. The present condition of London and other large towns is hardly short of a disgrace to our civilisation. How often is a man who has broken his leg carried to the hospital in a hansom cab, which is about the worst of all possible conveyances in which to lift or from which to remove an injured man! The results of such journeys are often the conversion of simple into compound and complicated fractures, with all their attendant danger. Cases of unconsciousness suffer quite as much, for in many cases the horizontal posture is of the greatest importance. Nor is the value of such conveyances limited to the sufferers in accidents and from sudden unconsciousness. In large numbers of the patients who are removed from their own homes to the hospital a suitable mode of transit not only adds to their comfort, but lessens fatigue, conserves vital force, and secures against complications. There is, also, the great class of sufferers or convalescents from infectious diseases, who require a further separate mode of transit through our towns. This want has been in some measure supplied, and various hospitals, or some parish authorities, have established fever carriages. We must not overlook, too, the efforts that have been made by private bodies to provide conveyances of the kind indicated. The small hand ambulances now to be found at most, if not all, of the metropolitan police stations are a great improvement upon the old regulation stretcher. But all these together are not adequate to the necessity of the case. Mr. Harrison refers with evident admiration to the very perfect system in vogue at New York. Here every accident is reported at once to the district police station, whence a telephonic message is sent to the nearest hospital, from which are at once despatched a horse ambulance with a surgeon and complete medical and surgical stores for emergencies. This ambulance is always ready to leave at a moment's notice, and a special surgeon is told off to be in readiness to accompany it. It is stated that one result of this system is a decided lessening of the severity and extent of some of the injuries received into the New York Hospitals. These and similar ambulances can be used by sufferers in other ranks of life requiring to move about. It is hardly to be contemplated that at present such a system can be introduced into England. Our hospitals are not so connected with the districts in which they are placed, and are not so uniformly distributed, that it would practically succeed. It is a question, however, that the governing authorities of our hospitals ought to consider, whether by providing an efficient and always ready ambu-

lance, they will not add so greatly to the efficiency of the aid they render, that any expense it may involve will be abundantly compensated. But the responsibility does not rest only with our hospitals, although they will do well to lead the way; the parish authorities should be as careful to provide ambulances as fire escapes. We shall be very glad if Mr. Harrison can carry to a successful issue some scheme for providing Liverpool with suitable ambulances, for were it once adopted in such a city, its evident advantages would quickly secure its general application.

CRUELTY TO PIGEONS.

WE have repeatedly called attention to the cruelties practised under pretence of "sport" in pigeon-shooting at Hurlingham and elsewhere, tame pigeons being hustled off the traps, wounded, and tossed aside to die a death of lingering agony. A protest has now been lodged in the court of public opinion against the barbarous mode of importing live pigeons in crates so arranged that the birds are packed together in layers without room to move, numbers being suffocated on the voyage across the Channel, and the whole subjected to intolerable suffering. The pigeons so maltreated are said to be destined for victims at the various pigeon-shooting matches. This we doubt. Large quantities of these birds are required by the poulterers, and it is customary to supply them living, for slaughter when necessary. That, however, does not affect the question at issue, which is, whether it is humane to inflict utterly wanton torture on the creatures used either for pastime or as food? There can scarcely be a difference of opinion on this point. All must agree that nothing can explain or excuse the wrong-doing of which complaint has at length been made. Unfortunately there is a great deal of carelessness all the world over on the part of persons who do not "mean any harm" by the mischief they do. It is not necessary to assume, or even to suppose, that the importers of pigeons are intentionally brutish in their trade practices. They simply "do not think" of the suffering they cause their victims. Now that the wickedness of the mode of packing and conveying these birds has been exposed, doubtless something will be done to remedy the evil. Before the subject drops out of thought and memory—that is to say, within the next few weeks—it will be well to push the inquiry as to the packing and carriage of live animals generally, and particularly other birds and poultry which are imported from abroad. By extending the area of their observations, the benefactors who have brought this matter to light will find that there are several classes of live creatures of the feathered tribe treated scarcely less brutally than are the pigeons—for example, larks.

THE IRISH COLLEGE OF SURGEONS.

THE School duties of the Irish College were inaugurated with an Address by Mr. Rawdon Macnamara, whose long and intimate associations with the College are well known. Mr. Macnamara touched with great pathos on the relations of his family to the College in connexion with the premature death of his son, who, as well as his father and himself, had been entrusted with educational work in that illustrious school. He read no mean lesson to the students in simply mentioning the circumstances under which his son met his death: "Fever-stricken, he rose from his bed of sickness and rode seven-and-twenty miles to visit a pauper patient, laid low with yellow fever, returning the same distance the same day, thereby signing his own death-warrant. His end quickly came, and now he sleeps in a foreign land, remote from that of his birth." Such histories elevate medical life into a martyrdom, and the consideration of them gives dignity to medical study.

THE NEW ANATOMICAL BUILDINGS, ABERDEEN UNIVERSITY.

THE new buildings which have been in course of erection during the last twelve months in connexion with the anatomical department of Aberdeen University were opened on the 26th ult., the Principal and Professors of the University, the Lord Provost, and Town Council of Aberdeen, numerous members of the medical profession, and other gentlemen being present on the occasion. When Professor Struthers took office in the University, now eighteen years ago, it was found that new buildings would be necessary for this department. A plan was formed which has been worked on by successive additions from time to time, and a large addition to the dissecting-room, with accessory rooms, has at length completed the buildings. The accommodation now provided, including a new museum, new theatre, and this new addition to the dissecting-room, is four times that of the old buildings known to pupils of the school at the time referred to. The old theatre has been cleared of its benches, and is now occupied as a laboratory for microscopic anatomy, opening from the old part of the dissecting-room. Except this laboratory and the private work-rooms, every room is lighted from the roof. All the teaching rooms and the museum are on the same flat, and communicate conveniently with each other. The new dissecting-room has a gallery, along one side of which leads conveniently to the gallery of the museum. A room for injection, at the end of the new dissecting-room, communicates by a lift with the basement flat, in which accommodation is provided for heating, macerating, preserving, freezing, &c. The various rooms are fitted up with all modern appliances. After viewing the rooms, the company assembled in the theatre, Principal Pirrie in the chair, and remarks were made by the reverend Principal, the Lord Provost, Mr. Webster, M.P., the Earl of Aberdeen, and Professor Pirrie, warmly congratulating Dr. Struthers on the success of his efforts. A proposal, we understand, is likely to be set on foot to found an Anatomical Scholarship in commemoration of the completion of the buildings.

MEMORY IN CHESS-PLAYING.

WONDERFUL as are the feats of chess-players, who can work out a game or a series of games without seeing the board, there is nothing really remarkable in them. When once mastered, the trick is not only fairly easy of performance, but the fact that the process is purely mental rather facilitates than impedes the action of the mind. To the "blindfolded" chess-player there is present a mental picture of the board with the pieces in position. He can change the position of the men as easily as he can think, and after he has once mastered the difficulty of fixing the mental picture, it is distinctly before him. Some players, who do not in their common process of memory use picture phantoms, work out the moves as algebraical propositions are occasionally worked, by phantoms of sound; but, as a rule, chess-players are mental-picture-readers, and can at pleasure call up any one of several pictures of boards as they last conceived them. The most difficult feat, and one which very few mental chess-players can accomplish, is to play two or three games simultaneously, the moves made by their opponents being told them in close sequence and their own moves being directed after all the reports of the proceedings of their opponents have been received. Thus, if there be several players against the one mental player, he must be told and remember what each of his adversaries has done *before* he begins to give the instructions for his several counter-moves. In this exploit the most perfect development of the mental faculty of distinct picturing and the displacement and recall of mental pictures at will is exhibited. The prodigious difficulty of the feat can only

be realised in the attempt to perform it. Even the expert blindfolded chess-player can rarely succeed in accomplishing the performance we have attempted to describe.

TYPHUS IN LONDON.

THE present outbreak of typhus in the metropolis, and the disclosures to which it has given rise, are eminently discreditable to the local sanitary administration which is responsible for the health of London, although scarcely more so than the continued prevalence of epidemic small-pox. Typhus is now an almost unknown disease in all our large provincial towns except Liverpool, and yet the contagium, in its most virulent form, is preserved in such metropolitan filth-dens as those recently exposed in Lisson-grove, Marylebone. During the eight weeks ending October 27th, 59 cases of typhus were admitted to the Metropolitan Asylum Fever Hospital at Homerton; and of these, no fewer than 34 were admitted from Marylebone, 14 from Whitechapel, and 7 from Stepney. These hospital cases, however, represent but a small proportion of the cases that have occurred recently in London, a large majority of which have arisen from the outbreak in Charles-street, Lisson-grove. During the past thirteen weeks 29 deaths have been referred to typhus in London, only a small proportion of which have occurred in hospital. The last weekly return of the Registrar-General reports 4 deaths from this disease, all in private dwelling-houses; these were registered in Marylebone, Whitechapel, Stepney, and Deptford. Several of the staff of the Homerton Fever Hospital have been attacked by the disease while in discharge of their duties.

PUBLIC DOCTORS FOR NIGHT EMERGENCIES.

A WRITER in the lay press directs attention to the want of some public provision of medical aid for emergencies in the night. He says he was lately on an inquest on a poor woman who bled to death while her husband and a policeman were for an hour trying to rouse a doctor who had engaged to attend her. This statement requires explanation. He shows, with more effect, that in Paris, where, as in Brussels, there is a public provision of this sort, in the quarter ending Sept. 30th last, 1687 visits were paid to night emergency cases by the public doctors. We have repeatedly directed attention to this question. The humanity of the medical profession prevents scandal arising from neglect so frequently as would otherwise be the case. But the public has no right to throw on the medical profession alone such a serious duty. The necessity might be met by an extension of the system by which the police are empowered to summon, and to pay, medical men in cases of accident. The objection to this arrangement would be its liability to abuse by unprincipled people; but proceedings might be taken by the police against such persons.

ACTION OF DUBOISIA ON THE CIRCULATION.

IN a memoir on this subject in the current number of the *Journal of Anatomy and Physiology*, Dr. Gibson gives the result of some researches he has recently made. Duboisia, as is well known, is obtained from Duboisia myoporoides, whilst another species, the Duboisia Hopwoodii, yields the stimulant narcotic used by the Australian natives, and named Pituri. The properties of Duboisia, the alkaloid derived from the Duboisia myoporoides, have been investigated by Mr. Tweedy and Dr. Ringer, and by Dr. Fraser, and their researches have shown that it dilates the pupil, dries the mouth, quickens the pulse, arrests perspiration, produces headache, causes drowsiness, and finally induces tetanus. The conclusions at which Dr. Gibson has arrived are:—1. That duboisia in quantities not exceeding 0·005 gramme raises the arterial blood pressure without materially affecting the pulse rate. 2. In quantities not exceeding 0·05 gramme it diminishes the blood pressure and lessens the pulse rate. 3. In quantities of 0·05 gramme and upwards it causes death, with the heart in a state of diastole. 4. Upon the heart itself duboisia has but little action, except in very large doses—i.e., doses of more than 0·05 gramme,—and it then causes arrest of the heart in diastole. 5. Duboisia stimulates the central inhibitory mechanism. 6. The alkaloid paralyses the peripheral inhibitory apparatus. 7. Duboisia stimulates the central vaso-motor apparatus, and causes contraction of the arterioles in small doses; in large doses it lowers the activity of the central vaso-motor mechanism and dilates the arterioles. 8. Duboisia has no influence over the sympathetic nerve.

DEATH FROM CHLORAL.

To judge from the number of deaths from chloral its habitual consumption is on the increase. An inquest was held at Leeds on the 25th ult. on the body of a colliery proprietor, who had been found dead in bed at an hotel in Norway with an empty chloral bottle by his side. He had been in the habit of taking chloral, combined with bromide of potassium and camphor, every night for ten years, having apparently contracted the habit while suffering from gout. Hardly a week passes without the record of a case of this nature. Chloral taken at first to relieve pain is continued until it enslaves. Sleep becomes impossible without it, and some night an unusual degree of wakefulness leads to a larger dose than usual, and the sleep comes that knows no waking. It is clear that greater restriction should be placed on the sale of the drug, and greater caution needed in its prescription, or before long the discovery of Liebreich will have done, if it has not already done, more harm in the world than good. American physicians have lately advocated a measure which should prohibit the repetition of a prescription by a chemist unless such repetition is authorised by a physician. It is improbable that such a measure would be practicable in this country, but it is extremely desirable, and would, we think, be perfectly feasible, that no prescription containing toxical doses of narcotic drugs should be repeated more than two or three times without renewed medical authorisation. At present a chemist is powerless before a prescription, and further limitations to the repeated sale of poisons would be useless without a limit to the repetition of prescriptions. It is greatly to be desired, also, that the Pharmacopœia should contain a preparation of chloral into the name of which the word does not enter.

SUPPERS.

SUPPERS are a mistake, unless they are in fact, if not in name, late dinners, and taken at a reasonably early hour. When our forefathers consumed their principal meal at midday, somewhere between our breakfast and lunch, they supped heavily at seven or eight o'clock, and went to bed about half-past nine or ten. This was equivalent to dining at the time now commonly chosen for our heaviest meal. We have, in fact, gone back to the old way of life, merely changing the names of our meals; but we commit the extreme folly of sitting up far into the night, and some of us get hungry again, and must needs have supper, if it be only a dish of broiled bones. These same bones, or rather the slices of meat on them, take, according to Beaumont's tables, which, be it remembered, refer only to the *stomach* process, nearly three hours to digest. It follows that the digestive organs are not left free to fall into a state of physiological rest or sleep until towards morning; and when they do sleep from sheer exhaustion, they not unfrequently wake the brain by some collateral trouble, the result of their

somnolence. The maxim of health should be—sup early and sup lightly; or if you do dine late, do not sup at all; and in determining what a light supper really is, bear in mind that some of the articles of diet which are deemed light and digestible really take a prodigious time for their disposal. For example, fine wheaten bread requires fully three hours and a half, and the farinaceous foods generally fall into the same category. In short, for a speedy relief of the stomach from its labour and difficulties with a view to sleep, many of the descriptions of food which are justly esteemed for their nutritious value are unsuitable.

NATURE'S RESPIRATOR.

THE season of cold, raw, damp, and foggy weather is upon us, and many will be its victims. Among other causes, the inhalation of cold, and especially of dirty, air must take a high place. Man is, however, provided with a safeguard against this danger. The double passage to the lungs, through the nose and through the mouth, suggests some difference in use, and this becomes certain when we find such a difference in the two routes as actually exists. The air passing into the lungs through the nose in quiet respiration is warmed as it passes over the lower turbinated bone with its very vascular mucous membrane, while, as the cavity is so narrow, the air is also to a great extent filtered and in this way deprived of its dangerous characters, even before it reaches the larynx. Those, therefore, who in the cold and in fogs wish to avoid catarrhs should be careful to *inspire* only through the nose. With most this will require some practice, but the trouble will be well repaid. Some, too, will find the impure air of a London fog very irritating to the nasal mucous membrane, and thus a demonstration of the irritant properties of the suspended matter which in breathing through the mouth gets free access to the lungs may be obtained. Those who are specially anxious to preserve their voice—as preachers, singers, and judges—stand in special need of this precaution, which is as effective as it is simple, and has many and great advantages over all the artificial respirators yet invented.

DEATH OF DR. DAVID FOULIS.

WE regret to have to announce the death of Dr. David Foulis, of Glasgow, at the early age of thirty-five. Though well known in Glasgow and the surrounding district as an able and rising surgeon, it was chiefly as a specialist in diseases of the throat that Dr. Foulis had made his mark. He achieved something of a European reputation by his performance, for the first time in this country, of the operation of extirpation of the larynx, an operation which he had repeated with equal success. Recently he had occasion to perform tracheotomy in two cases of virulent diphtheria; from these cases he caught the disease and died after a few days' illness, another sacrifice at the shrine of duty.

CLEARING OUT FEVER DENS.

IT is satisfactory to note the progress, slow as it is, of the sanitary demolition of fever dens. Much difficulty has been encountered in many districts in consequence of the "paying" character of the house property which it was required to destroy. The owners of tenements sublet in single rooms, or small sets of apartments, generally receive a total rental greatly in excess of that which is obtainable from a single tenant. For example, in the course of inquiries instituted in Westminster some years ago, it was ascertained that the owner or leaseholder of a house of moderate size, for which £100 a year would have been a high rental, obtained on the average of a series of years between £250 and £300. This may have been an exceptional case in the sense of being an extreme of profit, but it may be fairly taken as a typical instance of the results which accrue from a process of subletting to the poor. In many instances the gains of the landlord are increased by systematically neglecting repairs. In few cases is much attention paid to dilapidations, in scarcely any is a single shilling bestowed on the drainage or ventilation of property of this class. It is easy to understand that any movement inaugurated with a view to destroy such houses as those to which we refer must encounter serious opposition. It is therefore, we say, satisfactory to find that any great progress is possible.

EXPLOSIVE LAMPS.

THE number of accidents with lamps burning materials which give off explosive or highly inflammable gases is, we see reason to fear, very large. The papers, of course, only notice the cases that end fatally, either as a result of direct injuries inflicted by the explosions or, as in a recent instance, by the ignition of clothing and bad burns. For every such case there are, probably, a score or more of cases in which severe though not fatal mischief is done. It is much to be regretted that the use of explosive or excessively gaseous oils and spirits is increasing. Among the humbler classes of the community the use of candles for lighting purposes, and particularly in work-rooms—which are for the most part also living-rooms,—has ceased. The cheaper lamps—and they are very cheap, and wonderfully unsafe as a rule—are made to burn materials that readily explode. It is a pity the heavier oils, which do not give off dangerous gases or vapours, cannot be used instead. The difficulty arises from the costly construction of the necessary lamp. Something ought to be done to remedy this evil, and to provide an apparatus for lighting which is at once safe and cheap.

THE ERICHSEN TESTIMONIAL FUND.

A GENERAL meeting of the subscribers to this fund will be held at the University College Hospital, on Saturday, the 12th inst., at 4 P.M., to pass the necessary resolutions for carrying into effect the proposed testimonial. It has been decided to close the list of subscribers, now amounting to over 300, at the end of the month; so that those persons who desire to assist in the excellent endeavour to do honour to Mr. Erichsen, as one of the most distinguished surgeons and teachers of our time, should send in their contributions without delay to the honorary secretary of the fund, Mr. Marcus Beck, 30, Wimpole-street.

THE LATE DR. HAYDEN, OF DUBLIN.

AT a meeting of the students of the Catholic University Medical School, recently held, the following resolution was unanimously adopted:—"That we, the students of this school, beg to tender our heartfelt sympathy with the family of the late Dr. Hayden, our highly esteemed and deeply lamented Professor, in this their sad bereavement."

THE CHEMISTRY OF TETANUS.

THE amount of lactic acid and its salts contained in tetanised and normal muscles has been investigated by J. W. Warren. Especial care was taken to eliminate the effect of post-mortem decomposition by freezing the body immediately after death. In the case of three healthy rabbits killed by bleeding 100 grms. of muscle contained ·119 grm. of lactic acid, while the same quantity of muscle from three tetanised rabbits contained only ·077 grm. In another similar experiment the corresponding amounts were ·208 and ·070 gr.—a still more striking difference. The comparison was then made of the muscles of the same

animal. One leg was paralysed by division of the sciatic nerve, and the other leg was tetanised. The amount of lactic acid in the latter was only one-half of that contained in the former. Similar results were obtained in some experiments on frogs; in every instance tetanus lessened the amount of lactic acid to one-half.

ROYAL COLLEGE OF SURGEONS IN IRELAND.

BY the death of Dr. McClintock a vacancy for a Member of Council of this College has occurred, and so far five candidates have declared their intention to come forward. These are Mr. Butcher, an ex-president of the College; Mr. William Carte, of the Royal Hospital; Mr. Baker, of Steevens'; Mr. Franks, of the Adelaide; and Mr. Nixon, of Mercer's. It is rumoured that two of these have withdrawn, but it is tolerably certain that the contest will lie between the first two named.

PULMOMARY ENDOCARDITIS.

ACUTE lesions, considerable in degree, on the right side of the heart, are so rare that a case which recently occurred among the patients of M. Pitres at Bordeaux deserves mention. The cause of death was pneumonia, and cardiac mischief was not suspected during life. The left side of the heart was normal, but the greater part of the infundibulum of the right ventricle was occupied by a tumour, the size of a walnut, connected by a pedicle with the right side of the pulmonary orifice; the corresponding segment of the valve had disappeared, and the anterior segment was covered with vegetations. The mass had not caused complete obstruction.

THE annual collections in the churches and chapels of Birmingham on behalf of the medical charities of the town were made on Sunday last for the twenty-third time. The returns, it appears, so far show a considerable falling-off from those of recent years, the total received being barely £3000, as compared with £4886 last year and £6414 in 1878. Several returns, however, have yet to be received.

IT appears that the number of candidates who have presented themselves this year for the examination in State Medicine at Cambridge is considerably in excess of the average. In the absence of any special reason for this increase, it seems fair to assume that the importance of the certificate of proficiency in Sanitary Science is becoming more fully appreciated.

THE death is announced of Thomas Michael Greenbow, M.D. Durh, F.R.C.S. Eng., consulting surgeon to the Newcastle-on-Tyne Infirmary. The deceased, who was in the ninetieth year of his age, was one of the oldest Fellows of the Royal College of Surgeons of England, whilst his diploma of Membership bears date Aug. 5th, 1814.

AT a meeting of the Medical Society of the College of Physicians, Ireland, held on the 26th ult., a vote was passed with regard to the loss the Society had sustained by the death of Dr. McClintock, and tendering their sincere sympathy with his relatives in their bereavement.

WE understand that the patient upon whom Mr. Spencer Wells performed excision of a cancerous gravid uterus on Oct. 21st is progressing most satisfactorily towards recovery.

MR. S. D. DARBISHIRE, M.A., M.B., Balliol College, is a candidate for the office of University coroner, Oxford, now vacant.

AT a congregation held at Oxford on Friday last Professor Max Müller was unanimously elected Curator of the Bodleian Library, in the vacancy occasioned by the decease of Professor Rolleston.

DR. J. BRAXTON HICKS, F.R.S., has recently been elected an Honorary Fellow of the American Gynæcological Society.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Hampstead (*Metropolis*).—Dr. Edmund Gwynn reports for the year 1880 a death-rate of 12·6 per 1000 of the inhabitants, as compared with 22·2 in the metropolis generally. The population of this district, as enumerated at the last census, was 45,436, an increase of 40 per cent. since the census of 1871, and of 67 per cent. since the census of 1861. The birth-rate of the district in 1880 is given at 24·1 per 1000. The mortality from the seven principal zymotic diseases in the district was below the average of the previous ten years, but higher than for 1879, and was equal to a rate of 1·2 per 1000 inhabitants, as compared with 3·8 for the whole of London. The incidents of the prevalence of disease in Hampstead during 1880 do not call for special notice, but the following suggestive observation with reference to the presence of the Metropolitan Asylums Board Small-pox Hospital there, now closed for some time, deserves to be noted:—"Perhaps one cause of the spread of small-pox near a small-pox hospital set down in the midst of a populous neighbourhood, occupied to a great extent by persons of the middle and respectable lower class, may be found to be due to the great change of inhabitants that immediately takes place in the surrounding locality. In fact a constant migration is going on during the time the hospital is open; houses and lodgings are left vacant or fall in rent to such an extent as to attract a lower and more careless class, who are sure to bring with them dirty habits and a certain percentage of unvaccinated people."

Huddersfield.—Mr. Spottiswoode Cameron reports during the four weeks of September a death-rate of 15 per 1000 population, as compared with 25 per 1000 during the five weeks of the corresponding month in 1880. The bill of health for the past month in the borough was not so clean as the medical officer of health could have wished to see it. The cases of infectious sickness reported to the sanitary authority under the Local Act included scarlet fever, measles, diphtheria, and enteric fever, and five cases of scarlet fever, five of enteric fever, and a case of diphtheria were removed to the Corporation hospital. It is doubtful, however, whether of the cases of enteric fever reported, three were actually cases of that disease. Mr. Cameron has thought it desirable to address a note to the medical men of the borough, asking for information as to cases of infectious disease of a doubtful nature.

Lincoln (*Rural*).—Dr. Harrison, the medical officer of health to the sanitary authority of this district, in a recent report directs attention to the remarkable difference in the prevalence of diarrhœa in the rural sanitary district of Lincoln as compared with the urban. He reports four deaths from diarrhœa during the year in the rural district among a population of 26,000, while the returns for the urban district show a mortality of 28 from the same disease among a population of 36,000.

Greenock.—Dr. Wallace reports for the four weeks ending October 1st a mortality at the annual rate of 19·9 per 1000 inhabitants. Among the returns of sickness are included one case of typhus, occurring in a condemned property, 17 of enteric fever, and 78 of scarlet fever.

THE METROPOLITAN ASYLUMS BOARD AND THE LOCAL GOVERNMENT BOARD.

The Metropolitan Asylums Board is determined to saddle that "wicked body"—as a Southwark ratepayer recently termed it—the Local Government Board, with the responsibility of extricating the Asylums Board from the slough of

difficulties, legal and administrative, into which it has chanced to become embedded. At the meeting of the Asylums Board on the 29th ult., Mr. Galsworthy, the vice-chairman, moved as follows:—"That having regard to the interlocutory injunction recently granted by the High Court of Justice, restraining the managers from continuing to use the Fulham Hospital, constructed at the expense of the ratepayers generally, for the purpose for which it was established—namely, for metropolitan pauper patients, irrespective of area, and restricting the use of such hospitals within a limited area, as well as the injunction granted by the Court of Queen's Bench against the use of the Hampstead Hospital, and to the several threats of further legal proceedings, the managers are of opinion the time has arrived when the General Purposes Committee should seek an interview with the President of the Local Government Board, and ascertain whether the Board are prepared to take steps, and, if so, what steps, to enable the Managers to carry out their duties according to the spirit and intention of the Metropolitan Poor Act under which the Metropolitan Asylums Board was constituted." The motion was adopted unanimously by the Asylums Board, and we shall see what will come of this further request to the Central Board to pluck the chestnut from the fire which they have so efficiently aided in putting there, and roasting to a temperature which causes a sympathetic tingle to run through the fingers in view of any attempt to remove the morsel from the glowing embers. Hitherto the Metropolitan Asylums Board in its appeals for help to the Local Government Board has been met and foiled with a degree of astuteness which says much for the desire of that Board to save its skin, but little for its statecraft. We fear, alas! that Mr. Galsworthy's motion will only furnish another occasion for a display of that exquisite ingenuity which the Central Board possesses of getting under a difficulty if it cannot get over it.

THE HASTINGS AND ST. LEONARDS SANITARY AID ASSOCIATION.

A meeting was recently held in Hastings, Sir Thomas Brassey, M.P., in the chair, to consider the future of the Sanitary Aid Association of the borough, this being threatened with dissolution by the removal from St. Leonards of the manager and founder of the Association, Mrs. Johnstone. The Association has, during its existence, rendered excellent service to the borough by giving assistance in the sick-room, and promoting habits of precision among householders in carrying out sanitary measures, and especially the details of disinfection, and this at the comparatively insignificant annual expenditure of £100. The meeting, we are glad to say, passed a unanimous resolution: "That in the interest of the public it is desirable that the work of the Association should be steadily and vigorously carried on," and warmly recognised the services which Mrs. Johnstone had rendered to the borough. The chairman expressed the opinion that the Association having thoroughly justified the work it had undertaken and received the approval of the medical profession of the borough, the time had come when the duties it undertook to perform should now be adopted and carried out by the municipality. We venture to disagree with this position. It is very doubtful whether duties of this kind could be carried out successfully by a sanitary authority. Mrs. Johnstone's Association is directed to the cultivation of those household and individual habits of sanitary precision which are needed to give full effect to sanitary legislation, but which must be acquired by households and individuals themselves, and which, we believe, are best promoted by voluntary efforts. As Dr. Croucher aptly said, in the course of the meeting, "It was well known that the duties of nurses and others connected with the Association could not be relegated with any amount of decency to the sanitary inspector of the town."

THE ALKALI, ETC., WORKS REGULATION ACT, 1881.

The Local Government Board have issued to the clerks of sanitary authorities a circular stating that, with a view of giving effect to the provisions of this Act, they are desirous of ascertaining the number of works in the several sanitary districts in England and Wales which will be affected by it, and the names and addresses of the proprietors or managers of such works. The works to which the Act applies are, it is remarked, sulphuric acid works, chemical manure works, gas liquor works, nitric acid works, sulphate of ammonia works, and muriate of ammonia works, and chlorine works, or works in which chlorine, bleaching powder, or bleaching liquor is made. The Act also provides for the inspection of salt works in which the extraction of salt from brine is carried on, and cement works, or works in which aluminous deposits are treated for the purpose of making cement.

THE CAMP HOSPITAL AT FINCHLEY.

From a report presented to the Islington Vestry by its Sanitary Committee, it appears that the camp hospital for small-pox cases, opened at Finchley on the 20th of August last, was closed on Sept. 24th. During the period the hospital was open 62 patients were admitted, 61 suffering from small-pox. Of these cases 27 were serious and 34 of a slighter type. Six of the serious cases died. One of these deaths occurred among 45 of the patients who had been vaccinated, and five among 15 patients who had not been vaccinated or whose vaccination was doubtful.

DISMISSAL OF DR. KENNY.

At a meeting of the guardians of the North Dublin Union, held on the 26th ult., a sealed order was received from the Local Government Board removing Dr. Joseph E. Kenny, one of the medical officers of the workhouse. Dr. Kenny is at present a prisoner in Kilmainham gaol, and this proceeding of the Local Government Board will prevent his being elected for the future to any Poor-law medical appointment in Ireland.

The City of London Union and the Local Government Board are in collision about the question of the salary of the vaccination officer for the union. The guardians wish to pay their officer by salary; the Local Government Board desire payment by results. The guardians, in the view of the Local Government Board, seek to exalt the office of the vaccination officer above the point at which they are justified by the duties of the office, and by attaching an exorbitant salary to these duties have given rise to dissatisfaction among vaccination officers generally. Dr. Stevens, of the Local Government Board, attended a recent meeting of the guardians to explain the views of the Local Government Board on the subject, but with the only result of causing the question of salary to be referred for further consideration to the Out-relief Committee.

The medical officer of health for the urban sanitary district of Harwich has been writing to the local press to remove certain erroneous impressions respecting the sanitary condition of the borough. He states that last year the general rate of mortality of the place did not exceed 17·6 per 1000 of the inhabitants, and that the total mortality to the present during the current year shows a rate of 16·8 per 1000 living. The zymotic death-rate for the current year is given at 2·1 per 1000; for the past year as 1·8. He regards, with justice, these returns as testifying well to the favourable health-conditions of the locality.

The Exeter Corporation, as Sanitary Authority, have had to take notice of the insanitary condition of certain parts of the present post-office of the town, much to the discomposure of the post-office officials, who considered that Government buildings were exempt from local interference. The action of the Corporation has, however, had the desired effect, and they have been informed by the Postmaster General that certain needful alterations will be carried out, and a new post-office erected as speedily as practicable.

At a recent meeting of the Southend Local Board, Dr. Phillips reported a case of scarlet fever, in regard to which the parents, notwithstanding his remonstrances, had moved the patient in a cab to the railway station, and thence conveyed him by train to London. The Local Board have decided to prosecute the parents for this breach of the Public Health Act.

Derby, having allowed its small-pox "sanatorium" to fall out of order, is now under the necessity of placing it again in repair on account of the presence of small-pox in the town.

A householder was recently fined 10*s.* 6*d.* with costs in the Bradford Police Court for not having given information to the medical officer of health for the borough of a case of scarlet fever in his house, in accordance with the provisions of a local Act. The householder pleaded that he was unaware of the requirements of the Act in this respect until informed

of this by the medical officer of health, who had become aware of the existence of the case. No medical man was, in the beginning of the case, in attendance.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

As may be expected at this season of the year, especially when the recent low temperature is borne in mind, the rate of mortality in our largest towns continues to increase. During the week ending last Saturday 5516 births and 3202 deaths were registered in twenty of the largest English towns. The annual death-rate in these towns, which had increased from 17·9 to 21·2 in the four preceding weeks, further rose to 20·2 last week. The lowest rates were 13·2 in Plymouth, 16·8 in Sheffield, and 19·2 both in Birmingham and Leeds; the rates in the other towns ranged upwards to 25·1 in Newcastle-upon-Tyne, 25·4 in Wolverhampton, 27·3 in Liverpool, and 33·3 in Hull. The deaths referred to the principal zymotic diseases in these twenty towns were 481; they included 155 from scarlet fever, 82 from "fever" (principally enteric), 66 from measles, 64 from diarrhœa, 53 from whooping-cough, 35 from diphtheria, and 26 from small-pox. The annual death-rate from these zymotic diseases averaged 3·3 per 1000 in the twenty towns, and ranged from 0·0 and 1·1 in Plymouth and Sheffield, to 5·4 and 14·1 in Liverpool and Hull. Scarlet fever is still by far the most fatal zymotic disease in these towns, and showed the largest proportional fatality last week in Hull, Sunderland, Brighton, and Nottingham; no fewer than 39 more fatal cases were recorded in Hull, making 357 that have occurred within that borough since the beginning of July last. The 35 deaths from diphtheria in the twenty towns exceeded the numbers in recent weeks, and included 25 in London and 7 in Portsmouth. The deaths referred to "fever" were not quite so numerous as in the previous week, and showed the largest proportional excess in Brighton, Bristol, and Leeds. An outbreak of measles was recorded in Leeds. Small-pox caused 25 more deaths in London and its suburban districts, one in Salford, and one in Newcastle-upon-Tyne. The number of small-pox patients in the metropolitan asylum hospitals, which had been 422, 443, and 455 on the three preceding Saturdays, was 453 at the end of last week; these included 152 in the *Atlas* hospital ship, and 51 in the Convalescent Hospital at Darenth. The new cases of small-pox admitted to these hospitals were 74 last week. The deaths referred to diseases of the respiratory organs in London, which had steadily increased in the eight preceding weeks from 115 to 319, further rose to 376 last week, and exceeded the corrected weekly average by 31. The causes of 67, or 2·1 per cent., of the deaths in the twenty towns last week were not certified either by a registered medical practitioner or by a coroner. The proportion of uncertified deaths, which did not exceed 0·9 per cent. in London, averaged 3·3 per cent. in the nineteen provincial towns. All the causes of death were duly certified in Bristol and Birmingham, whereas the proportions of uncertified deaths were largest in Oldham, Leeds, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual death-rate in the eight Scotch towns, which had been equal to 21·4 per 1000 in each of the two preceding weeks, was 21·6 during last week, and 0·4 below the average rate in the twenty large English towns. The deaths referred to the principal zymotic diseases in these Scotch towns, which had been 108 and 79 in the two previous weeks, rose again to 95 last week; of these, 24 resulted from diarrhœa, 21 from scarlet fever, 18 from diphtheria, 13 from whooping-cough, 10 from measles, 9 from "fever," and not one from small-pox. The annual death-rate from these zymotic diseases averaged 4·1 per 1000 in the eight towns, and was 0·8 above the average rate from the same diseases in the twenty English towns; this zymotic rate ranged from 2·3 in Greenock to 5·6 in Paisley. The fatality of diarrhœa in the Scotch towns continues to exceed that prevailing in the English towns. The 9 deaths from "fever" showed an increase upon the low number in the previous week, and included 5 in Edinburgh and 4 in Glasgow. The fatal cases of scarlet fever showed, however, an increase; 8 occurred in Edinburgh, 7 in Glasgow, 4 in Dundee, and 2 in Greenock. Eleven of the 18 deaths referred to diphtheria were returned in Glasgow, as were 8 of the 10 deaths from measles. The deaths attributed to acute diseases of the lungs (bronchitis, pneumonia, and pleurisy), which had been 108 and 103 in the two previous weeks, declined to 99 last week, and were equal to an annual rate of 4·3 per 1000, against 4·6 from the same causes in London.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 18·2 and 21·9 per 1000 in the two preceding weeks, further rose to 23·0 last week. The 154 deaths in the city showed a further increase of 7 upon the low numbers in recent weeks, and included 12 which were referred to the principal zymotic diseases, corresponding with the number in each of the two previous weeks; of these, 4 resulted from "fever," 3 from scarlet fever, 2 from measles, 2 from diarrhœa, and one from diphtheria. The annual death-rate from these zymotic diseases was equal to 1·8 per 1000, while the rate from the same diseases was 3·2 in London and 4·3 in Edinburgh.

HEALTH MATTERS GENERALLY AT HOME AND ABROAD.

HYGIENE OF THE TRANS-SAHARAN RAILWAY.

In view of the projected railway across the desert of Sahara, connecting Algeria with Senegal and Western Soudan, Dr. Ch. J. Masse has thought it desirable, in a pamphlet published by Calmann Lévy, to consider the medical and hygienic questions to which such a project gives rise, both as regards the workmen engaged in the construction of the line and the linking of Algeria with the yellow-fever zone of West Africa. With regard to danger from carriage of yellow fever into Algeria he would have the railway constructed in two parts, so as to interrupt direct communication between Senegal and Algeria and at the point where the interruption of the line takes place, necessitating a change from the one part to the other, he would establish a special sanitary staff who should have for duty to inspect the passengers from Senegal when there is danger of yellow fever, and adopt such measures of quarantine for both passengers and goods as may be deemed requisite. He, in fact, would repeat, as to yellow fever, the measures adopted as to cholera at Jeddah and other places in the East with regard to the pilgrimage to Mecca.

CHOLERA IN MECCA.

A correspondent of *The Times*, writing from Jeddah under date October 9th, states that the reports of the prevalence of cholera are grossly exaggerated, and that it is doubtful whether the disease reported to be "cholera" is of the true Asiatic type. He describes the disease as having at no time been serious, and states that the mortality had not exceeded 40 a day among a mixed population estimated at from 60,000 to 70,000, including numerous pilgrims. "Latterly," it is added, "the deaths from cholera have ranged from 6 to 10. The latest official report, Oct. 6th, contained but one fatal case in all Mecca." This writer speaks with the utmost contempt of the farcical character of the quarantine arrangements carried out, or assumed to be carried out, by the Ottoman and Egyptian authorities. We have received a note from a medical correspondent in Jeddah, dated the end of September. This writer raises no question as to the nature of the disease reported at Mecca, and simply refers to the outbreak as "very slight." Later information seems to imply that cholera in Mecca has practically ceased, and that there have been no marked indications of its spread within and beyond the boundaries of the Hejaz.

A Health Society, with the Earl of Rosebery as President, was publicly inaugurated on the 28th ult. at Edinburgh. The prominent objects of the society will be the promotion of personal and domestic cleanliness, habits of temperance and self-denial, and the observance of the laws of health generally. Arrangements have been made for the delivery, during the ensuing winter, of Saturday evening lectures by medical men of the city.

A lodging-house keeper has been fined £5 and costs by the Liverpool magistrates for letting a house which had been previously tenanted by a family who had suffered from scarlatina, and which had not been disinfected in the interval.

The new waterworks at Congleton, constructed at a cost of £12,000, were opened by the Mayor on the 27th ult.

THE SERVICES.

ARMY MEDICAL DEPARTMENT.—Surgeon-Major Edmund Greswold McDowell to be Brigade Surgeon, vice A. G. Young, granted retired pay. Surgeon-Major Curtiss Martin to be Brigade Surgeon, vice C. A. Innes, M.D., granted retired pay. Surgeon-Major William Broughton Davies, M.D., African Medical Service, has been granted retired pay. Surgeon-Major Alexander Francis Preston, M.B., has retired on temporary half-pay. Surgeon-Major Tyler Oughton has been granted retired pay, with the honorary rank of Brigade Surgeon. Brigade Surgeon Theobald Ringer, M.D., Surgeon-Major Simon Mackertich, M.D., and Surgeon-Major Alexander Dugald Campbell, M.D., have retired from the service. Brigade Surgeon Samuel Jardine Wyndowe, M.D., of the Madras Army, to be Deputy Surgeon-General. Surgeon-Major John Barclay Scriven, of the Bengal Army, to be Brigade Surgeon.

MILITIA MEDICAL DEPARTMENT.—Surgeon-Major Henry Charles Garde, West Cork Artillery Militia, retires under the provisions of Clause 16, Army Circulars, 1881; also has been permitted to retain his rank, and to wear the prescribed uniform on his retirement; dated 29th October, 1881.—Royal Cornwall and Devon Miners: Surgeon Frederick Charles Bullmore resigns his commission; also has been permitted to retain his rank, and to wear the prescribed uniform on his retirement; dated 29th October, 1881.

RIFLE VOLUNTEERS. — 2nd Lincolnshire Corps: The services of Acting Surgeon John Kilshaw Kenyon are dispensed with; dated 29th October, 1881.

ADMIRALTY.—In accordance with the provisions of Her Majesty's Order in Council of 1st April, 1881, Fleet Surgeon William Redmond has been placed on the retired list of his rank. Staff Surgeon John Mockridge has been promoted to Fleet Surgeon in Her Majesty's Fleet, with seniority of 22nd October. Mr. E. K. Parson, Visiting Surgeon for Portsmouth, has been appointed, in addition, Assistant Visiting Surgeon at Southampton for the purposes of the Contagious Diseases Act, 1866 to 1869.

The following appointments have been made:—William Conolly, Fleet Surgeon, to the *Repulse*, vice Redmond; Surgeon William Hayes to the *Zephyr*, vice Pollard, whose appointment is cancelled, and who will remain in the *Boadicea*; Surgeon Charles F. Newland to the *Pembroke*, additional, for temporary service; Staff-Surgeon Arthur V. Smyth to the *Urgent*, vice Isaac, invalided; Surgeon John Acheson, M.D., to the *Urgent*, vice Biddulph, time expired; Surgeon Samuel Keays to the *Algerine*, commissioned; Surgeon James T. W. S. Kellard to the *Ganges*.

Correspondence.

"Audi alteram partem."

THE POISON OF THE COBRA.

To the Editor of THE LANCET.

SIR,—M. Lacerda claims to have discovered that permanganate of potash is an antidote for cobra venom. The action of potassic permanganate on the poison had, however, been studied in England before the publication of M. Lacerda's experiments. In a paper communicated to the Society of Analysts and published in *The Analyst*, vol. i., p. 294, 1877, detailing a method of separation of the active principle in a crystalline form, I remarked: "Out of the body a weak solution of alkaline permanganate of potash destroys at once and for ever the poison, and renders it as harmless as water; a wound of course may be advantageously washed with such an agent, but, as might be expected, it is of no use to inject it into the body as a true antidote." This opinion was based upon a number of experiments undertaken before the Vivisection Act stopped all researches of the kind in private laboratories. The animals selected were kittens, rabbits, chickens, and sparrows. It was found that if a fatal dose of cobra poison was injected by the ordinary subcutaneous syringe beneath the skin, and *immediately* afterwards some solution of permanganate likewise injected into the same wound, no fatal effects followed. If, however, the ordinary symptoms of poisoning were allowed to develop, then, whether the permanganate was injected into the wound itself or into the veins, death invariably resulted. In nine experiments undertaken in this way, with various percentages of permanganate, both in acid and alkaline solution, the result was in every case the same, and gave me no hope that permanganate would ever be useful save as a local agent; and, indeed, there are theoretical grounds for believing in the impossibility of an oxidising agent overtaking the poison as it were in the midst of the blood-current after the venom has been carried to the nervous centres.

It would indeed be a great boon to our tropical brethren if M. Lacerta's experiments should prove to be rightly interpreted. They are, however, so contrary to my own with the same substance and experimenting in quite a similar way, that at present I decline to accept them.—Yours, &c.,

A. WYNTER BLYTH.

The Court House, St. Marylebone, W., Oct. 20th, 1881.

PROFESSOR VIRCHOW'S TESTIMONIAL.

To the Editor of THE LANCET.

SIR,—Kindly allow me, through your columns, to inform the many admirers and pupils of Virchow in this country that I have undertaken to receive subscriptions towards the testimonial which our brethren of Germany are intending to present him with on the occasion of the completion of the twenty-fifth year of his Professorship in the University of Berlin, and of his sixtieth birthday. The presentation is to take place on the 19th instant. It is important, therefore, that subscriptions should be sent to me in sufficient time to be transmitted to Germany before that date. For the guidance of subscribers I may mention that the subscriptions in Germany range from 20*s.* upwards, with an average of 50*s.*, and that I shall be happy to receive either cheques crossed Bank of England, or Post Office orders, to the office in Vigo-street, London, W., made payable to myself.

The following subscriptions have been received:—

Sir Jas. Paget	£5	0	0
Sir Wm. MacCormac	2	10	0
Dr. Gerald Yeo...	2	2	0
Dr. Bristowe	2	2	0
Dr. Ord	1	1	0

I am, Sir, yours faithfully,

Old Burlington-street, Nov. 2nd, 1881. J. S. BRISTOWE.

THE ST. JOHN AMBULANCE ASSOCIATION.

To the Editor of THE LANCET.

SIR,—Doubtless others better qualified than myself will reply to the queries of "A Country Practitioner" on the above subject; allow me, however, to mention two facts which may assist him in his search for information. In the first place, up to the present date, I believe over one hundred centres have been formed in the leading towns of England and Scotland, in each of which at least two or three of the leading medical men are engaged in instructing the classes and otherwise assisting the local committee, thereby showing their appreciation of the value of the movement. Secondly, on the 26th instant, at the very time when "A Country Practitioner" must have been committing his letter to the post, the London medical men connected with the Ambulance Association were entertaining Major F. Duncan, R.A., at a banquet at Limmer's Hotel, as an expression of their hearty co-operation with him in his humanitarian work. I may add that among those who regretted their inability to attend were Dr. Lionel Beale, Surgeon-General Longmore, Surgeon-Major Moore, Mr. Pye, Dr. Julius Pollock, Mr. A. J. Norton, Mr. A. P. Gould, Dr. Collingridge, Mr. Sandwith, &c.; whilst those present at the dinner included Dr. Sieveking, Sir Wm. MacCormac, Mr. Edmund Owen, Surgeon-Major Baker, Mr. Cantlie, Mr. Wm. Rose, Mr. Herbert Page, Dr. E. O. Day, Mr. Street, Mr. Eve, Dr. Colquhoun, Mr. Samuel Benton, Dr. Eccles, Mr. Potter, Mr. Whitehead, Mr. Tyrrell, Mr. Leahy, Mr. Bruce, and Your obedient servant,

HARRY CROOKSHANK,

Science Club, Savile-row, Oct. 31st, 1881. Hon. Sec. for the Dinner.

TINEA VERSICOLOR (LICHEN CIRCINATUS).

To the Editor of THE LANCET.

SIR,—I am interested to learn that Dr. Crocker is of opinion that the affection thus named is really Tinea versicolor. I have for a long period been accustomed to

regard it as an irregular form of this disorder, and used to demonstrate it as such. There can be no doubt of the parasitic nature of it, although it is not easy to find the spores. Dr. Crocker well describes the appearances. It is not strange that different individuals should be differently affected by the same irritating parasite. The unusual amount of inflammatory accompaniment in certain cases I take to be due to the particular diathesis of the patient, and I think it will be found that "rheumatic" subjects, more commonly than others, present these irregular forms of the disease.

I am, Sir, your obedient servant,

November 1st, 1881. DYCE DUCKWORTH.

PARIS.

(*From our own Correspondent.*)

THE LATE PROFESSOR BOUILLAUD.

PROFESSOR BOUILLAUD, whose funeral took place last Monday, was one of the last representatives of that illustrious school which has done so much for the glory of French medical science. Born in 1795, he was a young and earnest student when Laennec's discovery of auscultation created, we might almost say, a civil war between the men of that period. While the older members of the profession, invested with official dignity like Chomel, resented and opposed the innovation (and in fact all innovations), the younger men, and, indeed, the whole body of students, plunged with extraordinary zeal and fervour into the study and practice of the new method, and reaped thereby an abundant crop of new and interesting facts. It was at that time that Bouillaud, auscultating the heart of his rheumatic patients, discovered the connexion between cardiac disease and rheumatism, which had been foreshadowed by other observers, but of which he was the first to give positive proof in the living patient. He created the word "endocarditis," and gave an excellent description of the anatomical changes which accompany that disease in its various forms, and through his exertions, a fact which till then had only attracted the notice of a few medical men, emerged into the full light of day, and became a part of our classical knowledge. Bouillaud's greatest victory was achieved in 1831, when he obtained by open competition the chair of clinical medicine at La Charité. The young professor, then in the full force of his talent, soon outshone his seniors, and attracted a numerous audience by his remarkable eloquence. But, unfortunately, like many men of his time and age, he had imbibed the notions of Broussais, and openly declared that almost all diseases were inflammations, and required to be treated by depletion of the vessels. To Broussais' milder method of applying leeches he substituted the radical system of "saignées coup sur coup," or thrice repeated bleedings, the patient being subjected to phlebotomy for the second and third time, before he had recovered from the shock of the first, thereby losing about fifty ounces of blood in the space of a single day. The most heated controversy raged upon this subject for many years, but the bitterness which was then engendered is now entirely forgotten, the great antagonists of that time, Laennec and Broussais, Louis and Bouillaud, having successively dropped into the grave. In the midst of the most brilliant period of his medical life Bouillaud was tempted to deviate into politics, and was returned to the Assembly from 1842 to 1846, by his native town, Angoulême. He stood forth as a member of the Liberal Opposition under Louis-Philippe, and after the Revolution of '48 was promoted to the post of Dean of the Medical Faculty. His reign was short and stormy; and when under the Presidency of Louis-Napoleon, an Anti-Republican Ministry came in, he was unceremoniously dismissed from his office—an insult which he bitterly resented to his dying day. The latter years of Bouillaud's career were marked by the highest distinction. He became a member of the Institute and of the Academy of Sciences. In this exalted position he seems to have chiefly acted the part of a *laudator temporis acti*, and whenever any new discovery in the circle of medical science was brought forward he almost invariably devoted his remaining powers to the task of proving that the fact had been known long before. In truth, this friend to scientific progress, this liberal politician, had seen the liberalism and progress of the present age outstrip his own notions, and had subsided in all respects into what may be called a Moderate Conservative. Towards the end of his life he had become a devout Catholic, and had given up his sanguinary medical doctrines, if not in theory, at least in practice. Bouillaud died suddenly at the advanced age of eighty-five, having retained a larger share of his intellectual powers than is usually the lot of men ripe in years, and bowed down under the weight of their experience. He left the reputation of an extremely upright, honourable, and well-meaning man, and of one of the most brilliant lights of science in the somewhat distant times of his youth and energy.

Paris, Nov. 2nd, 1881.

THE NEW ENTRIES.

TWO corrections require to be made in the numbers given in our last list of new students. At the Durham University there have been not 125, but 74 fresh entries, 35 of these being for the full curriculum, and 39 for the year of residence required in the University in the case of candidates for its degrees. This number does not include special entries for hospital practice. The figures quoted for Charing-cross School were too low. They should have appeared as follows: Full 43, partial 9, total 52.

Obituary.

ALFRED H. McCLINTOCK, M.D., LL.D., F.R.C.S.I., OF DUBLIN.

TO-DAY we supplement our notice of the death of this eminent obstetrician by some further particulars. He was a member of the Drumcoe family, of which the leading representative is Lord Rathdonnell, and was also connected with several other noble and distinguished families. His elder brother, Sir Leopold, received knighthood in 1860, in recognition of his successful explorations in the Arctic regions, and is at present Commander-in-Chief of the North American and West Indian Naval Stations. It may be here mentioned that this officer has been a most generous donor to the museums of the Irish College of Surgeons and the Dublin Society of specimens collected during his northern voyages.

Dr. McClintock, at a very early age, began the study of medicine in the County Louth Infirmary, under Dr. Brunker, who recently resigned the surgeoncy of that institution after more than forty years of most active and distinguished service. He subsequently studied at the Park-street School and the Meath Hospital, and obtained the licence of the Royal College of Surgeons in Ireland in 1842. He was at once selected by Dr. Charles Johnson as Assistant-Master of the Rotunda Lying-in Hospital, his colleague being Dr. Hardy. The truly valuable result of their labours in this renowned institution appears in their analytical reports of the 6634 deliveries which took place in it during the years 1842-3-4. The statistical tables and carefully although briefly noted clinical facts in this volume possess great and permanent interest.

In 1844, while holding office in the Rotunda, Dr. McClintock found time to obtain the degree of M.D. in Glasgow University; and he was also elected to the fellowship of his own college. Shortly after leaving this hospital, he was appointed to the Chair of Midwifery in Park-street School of Medicine; and held it until the dissolution of that institution in 1849, on its museum and its great anatomical teacher, Hugh Carlile, being transferred to Belfast Queen's College. He was elected Master of the Lying-in Hospital in 1854, having been, with the exception of Dr. Evory Kennedy, the youngest person ever chosen for this most valuable and responsible position. Having served the term of seven years with truly marked success, especially as a clinical teacher, he removed to 21, Merrion-square, where a very extensive, though select, midwifery and consulting obstetric practice rapidly rewarded the industry of his earlier years. Still he found time to record his "Clinical Memoirs on the Diseases of Women," 1863. This work obtained from British and foreign reviewers extraordinarily favourable notice, as it

most clearly gave, to quote the words of THE LANCET reviewer of the day, "evidence of the experience, clinical skill, soberness of judgment, and rigorous truthfulness in narration which characterised the author."

The editing of Smellie's Midwifery for the Sydenham Society was the only other extensive literary task which Dr. McClintock undertook, but this, especially the biographical notice, was so admirably done that the Edinburgh University in 1876 resolved to confer upon him the degree of LL.D. (*honoris causâ*). In these volumes, and in many separate addresses and biographical sketches, his rare scholarship and pure and vigorous style of English are manifest. As an example of the latter class may be adduced his address as President of the Obstetrical Society of Ireland, November, 1866. Therein he forcibly displays the importance of the obstetric art, which too long had been neglected by the medical and surgical corporations, with the exception of the Irish College of Surgeons, which in the very year of its institution, 1784, founded a chair of Midwifery. The address contains a heartfelt panegyric of his master, Charles Johnson, who had been an early occupant of this chair. Other examples of his happy style are the address conferring the Honorary Fellowship of his college on Prof. Helmholtz during March of the present year, and his remarks as president to those receiving diplomas in his college.

Professional honours flowed freely of late years on the subject of this brief notice. In 1879 he became President of the College of Surgeons; and during his year of office, the Crown seat on the Medical Council falling vacant, Lord Spencer conferred it upon him, although an uncompromising opponent of the present Government. His selection was likewise due to the earnest appeal of the Obstetrical Society to the Lord-Lieutenant that their branch of medical science should be represented. Although the Viceroy candidly stated that he thought a specialist less suitable than a physician or surgeon for the single State seat, the wishes of the obstetricians were acceded to by the Lord President of the Privy Council. The chair of the College of Surgeons has probably never been filled with greater firmness, impartiality, and dignity than during his term; and it was one of unusual anxiety. Amongst his honorary distinctions were the Presidency of the Dublin Pathological Society; the Mastership in Obstetric Art, Dublin University; the honorary membership of Obstetric and Gynæcological Societies in London, Edinburgh, New York, Boston, &c.; the Presidency-elect of the Dublin Branch of the British Medical Association; and, above all, the Presidency of the Obstetric Section of the International Congress of the present year. In his address on that occasion, in August, he said he felt his election to be the crowning-point of his professional career; and he further described himself as having reached the grand climateric—a period usually defined as the sixty-third year.

Some years ago, being made aware that he had cardiac disease, Dr. McClintock resigned all night practice. During last autumn he made, with his brother Sir Leopold, an extensive voyage along the American and West Indian coasts, and returned with renewed prospects of health and longevity, if the cheerfulness which brightened his refined features and the activity of his movements could be trusted as evidence. Two months ago, however, while attending a patient he was seized with paralytic symptoms, and despite the assiduous care of his brother-in-law, Mr. B. Wills Richardson, and of his lifelong friends Drs. F. and J. R. Kirkpatrick, he quietly passed away on Oct. 21st.

His interment took place in St. George's Cemetery, close by the tomb of Richard Carmichael, and was attended by the Fellows of his College, who had been specially summoned, his other professional brethren, and nearly 200 leading citizens. The officiating clergyman, in the course of a feeling address, said that the lives and convictions of three eminent medical men—Drs. Benson, Hudson, and McClintock—to whom he recently ministered were alone sufficient to refute that libellous saying, "Ubi tres medici, ibi tres athei."

Practitioners who sought Dr. McClintock's aid in consultation, the afflicted among medical men or their families, for whom he worked most energetically in the Benevolent Fund Society, and members of professional bodies with whom he was a firmly trusted counsellor, would without a dissentient attest that there never was a more upright or more earnest man. Indeed, his conduct in life was unvaryingly in accord with the motto of his family—"Virtute et labore."

DR. HAYDEN, OF DUBLIN.

THREE days after the remains of Dr. McClintock were removed from 21, Merrion-square, crape hung upon the door of No. 18: for Dr. Hayden was no more. A further coincidence may be noted—the one was President, the other President-elect, of the Dublin Branch of the British Medical Association. Dr. Hayden belonged to a Tipperary family, and two of his uncles were men of mark; the elder as Dean of Derry in the Established Church, and the younger the popular Lecturer on Physiology in the Peter-street School, and afterwards, when he was forced to give up the Fellowship of the College of Surgeons, the eccentric advertising practitioner. Of the latter, Thomas Hayden became the pupil, but of the characteristic just named, so far from being the imitator, no one had a stronger repugnance towards unworthy modes of attracting practice. Having obtained the licence of the College of Surgeons in 1850, he at once began as a teacher of anatomy, and two years after obtained, by examination, the Fellowship of his College. On the foundation of the Catholic University, in 1854, the rector, now Cardinal Newman, chose him for the chair of Anatomy, which he held to the day of his death. His colleague, Dr. Cryan, succumbed last February to a pulmonary attack very similar to Dr. Hayden's. Elected to the Physiciancy of the Mater Misericordiæ Hospital on its establishment, Dr. Hayden became a most industrious observer and clinical teacher, and accumulated the facts which he recorded in his exhaustive work on the "Diseases of the Heart and Aorta," 1875. Having resigned the Fellowship of the College of Surgeons, he was elected to the like position in the College of Physicians, and in that body was twice chosen by the President as his Vice-President. Had the state of his health been favourable it is believed he would have been unanimously called to the chair at the annual meeting on St. Luke's day. Dr. Hayden was one of the eight medical members placed on the Senate of the Royal Irish University by the Duke of Marlborough, then Lord-Lieutenant. His vacancy will be filled by the Convocation, that is at present the graduates of the Queen's University, and it is to be hoped their choice will fall on some surgical representative, for none such is to be found amongst the thirty-six senators.

On October 1st, while attending a meeting of the University, Dr. Hayden is believed to have suffered a severe chill, and pulmonary congestion so rapidly and so extensively ensued that his life was despaired of on the third day. He had been affected ever since his student days with a constant tendency to spasmodic cough and dyspnœa. His demise did not occur until the 30th, when pleural effusion terminated a most useful, laborious, and undeniably most honourable career.

GEORGE ALEXANDER MALCOLM SIMPSON, M.D.

THE subject of this notice was born in 1845 in Bengal, where his father, a native of Aberdeen, was stationed. The late Dr. Alexander Simpson, his father, was a man who did distinguished work in India, and fell a victim to cholera at Dacca, just when his time of service was nearly expired. He was greatly respected in India, and a handsome monument perpetuates his memory at the scene of his labours. George Malcolm came to Europe at the age of five, and received his education at Aberdeen, chiefly at the grammar school. Later he attended the Arts classes at the University of Aberdeen, passing to the medical classes without graduating in Arts. He was always an earnest and diligent student, and took his Bachelor of Medicine and Master of Surgery degrees with the highest academical honours. After graduating he spent some little time at the schools in London, and thence passed to Paris. Here he studied some months; and later went to Berlin, where he remained some time. On his return to England he was appointed House-Physician at the Middlesex Hospital, and on the completion of his term of office he was married to the second daughter of the late Professor Macrobin, Dean of the Medical Faculty, Aberdeen. The same year, 1870, he settled in practice at Highgate, in partnership with Dr. Forshall. Here he quickly made for himself a position and reputation. Enthusiastic by nature, he threw himself into all local interests and devoted much time to the Highgate Dispensary. Later he became Surgeon to the Volunteer Rifle Corps. He was

Visiting Physician to Cromwell House, the Convalescent Branch of the Hospital for Sick Children, and Surgeon to the National Schools. He took great interest in University reform, the political representation of the profession, and other subjects which engage earnest and far-seeing men. With yearly increasing popularity and practice he seemed destined for a long and successful career. Successful it certainly was when cut short by sudden, and to all who knew him, wholly unexpected, death. Though broadly built and inclined to be stout, he was always exceedingly active. After a hard day's work, or before it commenced, he would eagerly engage in lawn tennis in summer, or skate in winter. He had gone to Deeside for his autumn holiday this year, and was staying at Banchory, his favourite of all places. Here he appeared in robust health, walked his fifteen or twenty miles a day, and was in his usual excellent spirits. On the 13th of October, before he had risen from bed, he was seized with what he thought, in the first instance, was only indigestion, but which proved to be angina pectoris. With this awful malady he struggled for some hours, until death put an end to his suffering. He appeared to have had no warning of his disease, and within about a year of his death had been examined and passed for an insurance office. He leaves a widow and four young children to mourn his loss. Though buried at Aberdeen, on the day of his funeral all the shops in Highgate were closed, and on the following Sunday allusions to his loss and example were made from the pulpits of all denominations.

His abilities were of high order, his knowledge exact, and his education, as will have been seen, most thorough and liberal. With such advantages he might, had he been ambitious, have taken a more prominent position in his profession, but he could not have done his profession and the public better service. He was of the type of the general practitioner that we all honour. Thoroughly well versed in all the practical and theoretical medical knowledge of the day, with enthusiastic and self-sacrificing interest in his work, possessed of great judgment, tact, and an overflowing good nature, he was a man who inspired his patients with confidence, and increased the esteem with which the profession is regarded. He was an earnest and sincere Christian. Educated as a Presbyterian, he maintained his interest in, and connexion with his own church, though availing himself of the ministrations of the church where he was domiciled. By nature and training thoroughly liberal in his religious feelings, his faith was simple and genuine. A well-known friend has written, "I remember in a very early visit we had occasion to speak of our Lord's miracles, and he showed in a very few words and unobtrusively, his keen belief in the presence still of the same Power to heal. And this it was which made me regard him as an ideal doctor; that at the same time he was earnest in his love of science, and also regarded his profession as a direct administration of God."

Medical News.

ROYAL COLLEGE OF PHYSICIANS OF LONDON. — The following gentlemen were admitted Licentiates of the College on Oct. 27th :—

Bickle, Leonard Watkins, Albert-square.
Clowes, Herbert Alfred, M.B. Durham, Guy's Hospital.
Dawson, Rankine, Crosier-street.
Drysdale, Alfred Edgar, Stanford-road.
East, Frederick William, M.B. Durham, Clapton-square.
Foley, James Leslie, M.D. Montreal, Horton-road.
Gubbin, George Frederick, Westminster Hospital.
James, Charles Alfred, Dispensary, Stoke Newington.
Jennings, Charles Egerton, London Hospital.
Macnamara, James Thomas, Paris-street.
Mark, Leonard Portal, Queen Anne-street.
Martin, John Michael Harding, M.D. Brussels, Blackburn.
Miller, Herbert Percy, Stoke Newington-road.
Palmer, John, Middlesex Hospital.
Ross, James, M.D. McGill, Crosier-street.
Shearman, Percy Edward, Grove, South Wimbledon.
Twynam, George Edward, Blandford-square.
Usher, John Edward, M.D. New York, Argyll-square.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examination, received the Diploma in Dental Surgery at a meeting of the Board of Examiners on the 28th ult. :—

Headdey, Harvey Parry, Oxford.
Hedley, William Snowdon, M.R.C.S., Army Med. Depart.
Mason, Charles Browne, Exeter.
Richardson, Francis, Derby.
Turner, William Arthur, Chichester.

UNIVERSITY OF EDINBURGH. — The following candidates have passed the recent First Professional Examination :—

M. S. P. Aganoor, Alfred Aikman, M. S. Altounian, J. M. Balfour, M. M. Basil, B. K. Basu, James Bell, G. L. Bonnar, Fredk. Bond, J. E. Bottomley, Paul Bowes, Herbert Bramwell, D. M. Brown, T. A. Brown, J. R. Burns, J. M. Cadell, Henry Caudwell, Edward Carmichael, Thos. G. Churcher, E. W. Clarke, J. G. Cossins, A. H. Croucher, A. S. Cumming, Daniel Davies-Jones, Alex. Davidson, A. N. Davidson, D. R. Dow, Thomas Easton, Edwin Eckersley, George Fisher, J. W. Fox, A. E. Grant, Benjamin Griffiths, J. S. Haldane, B. P. Handyside, W. C. Helme, George Hewlett, W. H. Hill, Archibald Hood, T. A. F. Hood, Robt. Howden, R. E. Horsley, C. W. Howatson, A. W. Hughes, B. E. Iastrzebski, R. Jackson, Hugh Jamieson, Hugh John, John Johnston, Thomas Johnstone, G. H. Kenyon, Henry Ker, Francis Kraemer, David Laing, W. S. Lang, A. W. M. Leicester, W. M. Little, H. J. Mackay, Wm. Mackay, F. L. M'Kenzie, J. H. M'Kenzie, N. J. M'Kie, John M'Myn, Archd. Macqueen, G. D. Malan, J. W. Martin, D. J. Mason, Angus Matheson, R. T. Meadows, Wm. Miller, Duncan Menzies, Robt. Mitchell, B. M. Moorhouse, A. E. Morison, E. J. B. du Moulin, Daniel Mowat, W. J. Munro, J. H. Neale, J. H. Neathling, Sydney Partridge, Ian Paterson, M. G. Pereira, F. A. Peckley (with distinction), G. Y. Polson, H. P. Prankerd, H. H. Pridie, Joseph Priestley, J. M. S. Preston, E. E. T. Price, A. C. Purchas, Alwin Raimes, T. R. Rait, C. A. Renny, John Rigg, G. M. Robertson, John Robertson, J. S. Robertson, T. H. Robinson, Joseph Rutter, A. O. Schorn, William Shaw, John Simpson, George Smith, Wm. Sneddon, Y. S. Snitwong, Arthur Solomon, J. C. Steedman, H. F. D. Stephens, A. J. Stiles, H. J. Stiles (with distinction), J. W. Stirling, J. M. Stormonth, G. H. H. Symonds, John Sykes, T. S. Tanner, J. C. Taylor, William Taylor, Andrew Thomson, D. G. P. Thomson, H. A. Thomson, Thomas Thyne, Alfred Turner, J. W. O. Underhill, David Wallace, David Walker, E. F. S. Walker, N. P. Walker, L. W. Watson, A. K. Watt, E. G. Westenra, G. E. C. Wood, J. E. Wolfhagen, J. C. Young.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Oct. 27th :—

Kenny, Frederick Hamilton, Norwich.
Palmer, John, Middlesex Hospital.
Underwood, John C., Little Gaddesden, Hemel Hempstead.

The following gentlemen also on the same day passed the Primary Professional Examination :—

Edward T. A. Boyton, St. Bartholomew's Hospital; William Case, University College.

THE Hospital Saturday collections amongst the working men of Coventry have realised £328, being an increase of £100 over last year.

THE Rostrevor Waterworks were formally opened last week by the Countess of Kilmorey. The water, which is said to be very pure, is taken from the Rostrevor mountain.

THE Mayor of Liverpool announced on Wednesday, at a meeting of the Hospital Sunday, that by the death of Miss Hamilton £16,000 had come into the hands of the Corporation for distribution among the charities of the city.

TAUNTON AND SOMERSET HOSPITAL. — At the annual meeting of the governors of this hospital the following resolution was carried: "That it become a rule of this institution that a limited number of nurses over and above the requirements of the hospital shall be trained and maintained for the purpose of being out-door nurses."

THE GARFIELD NATIONAL HOSPITAL FUND. — A New York telegram says the Executive Committee of the National Hospital Fund have issued an address to the pastors of all the churches in the country, suggesting that Nov. 5th and 6th be set apart for the delivery of discourses appealing for contributions in aid of the above fund.

BIRMINGHAM PROVIDENT DISPENSARIES. — The second of these institutions has been opened in the Sherbourne-road in a magnificent building erected by money left for the purpose by the late Mr. Sands Cox. The following gentlemen have been elected on the staff: Mr. Herbert Bracey, Dr. Clibborn, Dr. F. Underhill, Dr. H. C. Wilson, Dr. J. W. Taylor, Mr. Joseph Hunt.

NOTTINGHAM GENERAL HOSPITAL. — The report read at the annual meeting of the governors and friends of this institution last week presented an unfavourable account of the financial condition of the charity, which called for serious consideration on the part of its supporters. The resignation of Dr. Morris as physician to the hospital was accepted, and Dr. Edw. Seaton chosen as its successor. A committee was appointed to ascertain the usual method of procedure in other hospitals with respect to the election of resident surgeon, with a view to a change in the mode of appointment of that officer in the Nottingham Hospital.

THE MIDDLESEX CORONERS.—At a meeting of the magistrates last week, Sir W. H. Wyatt moved that the following salaries be paid to the respective coroners—viz., Sir John Humphreys, £2207 14*s.* 8*d.*; Dr. D. Thomas, £2099 13*s.* 4*d.*; Dr. Diplock, £800; Mr. W. J. Payne, £54 9*s.* 3*d.*; and Mr. St. Clair Bedford, £500.

AT the close of the second of the Combe series of lectures now being delivered at Arbroath, Dr. Stirling announced that the Combe trustees had generously placed at the disposal of the directors of the museum a number of prizes to be awarded at the termination of the series to those who, from their answers, gave the most satisfactory evidence of having mastered the general principles involved in the subject, "Physiology and its Relations to the Laws of Health."

MEDICAL SOCIETY: COLLEGE OF PHYSICIANS IN IRELAND.—The following constitute the office-bearers for the ensuing year:—President: George Johnston. Vice-Presidents: Thomas Fitzpatrick, John William Moore. Council: J. Hawtrey Benson, Fleetwood Churchill, J. Magee Finny, A. W. Foot, Samuel Gordon, J. W. Grimshaw, Reuben J. Harvey, R. Jackson, Henry Kennedy, C. J. Nixon, W. G. Smith. Hon. Secretary and Treasurer: Alexander N. Montgomery.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. The Royal Free and the Charing-cross Hospitals become entitled each to £1000 under the will of the late Miss Charlotte E. Barr, of Alexander-square. Mrs. H. H. Jackson, late of Cambridge-terrace, bequeathed £50 to the Lying-in Hospital, Limerick. The Earl of Leicester, Holkham-park, Norfolk, has given £15,000 to the Norfolk and Norwich Hospital, of which he is president, to be added to the endowment fund. The late Mr. Sewell, of Reepham, Norfolk, has bequeathed to the same hospital £1000.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ALLAN, JAMES, M.A., M.D., has been appointed Medical Superintendent of Leeds Union Infirmary, vice G. F. Crooke, M.R.C.S. &c., resigned.

BEATTIE, J. ALOYSIUS, L.K.Q.C.P.I., L.R.C.S.I., has been appointed Resident Medical Superintendent at the North Head Quarantine Station, New South Wales.

FERGUSON, DANIEL, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of the Llanwnog District of the Newtown and Llanidloes Union.

FLOWER, FREDERICK J., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Warminster and Corsley Districts of the Warminster Union.

GROOM, HENRY T., M.R.C.S., has been appointed House-Surgeon to the Clinical Hospital for Children, Manchester.

JELLY, FREDERICK A., M.B., C.M., has been appointed Resident Physician to Saughton Hall Private Asylum, vice A. J. Morris, M.B., C.M., resigned.

KNAGGS, H. V., M.R.C.S., L.S.A.Lond., L.R.C.P.Ed., has been appointed House-Surgeon to the Boscombe Provident Infirmary.

PICKWORTH, ALFRED J., L.R.C.P. & L.M.Ed., L.F.P. and S. & L.M.Glas., has been appointed Medical Officer and Public Vaccinator to the Workhouse and 1st Alston District, Carlisle.

POTTS, EDWARD, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Tarporley District of the Nantwich Union.

SCHOLEFIELD, GEORGE E., M.B., C.M.Ed., has been appointed Medical Officer for the District of Skircoat and the Lower Division of Warley, in the Halifax Union.

SEATON, EDWARD, M.D., M.R.C.P.Lond., has been appointed Physician to the Nottingham General Hospital, vice Morris, resigned.

SELLERS, J. WILLIAM, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Barrow-upon-Soar District of the Barrow-upon-Soar Union.

STALLARD, J. PRINCE, M.B., C.M.Ed., has been appointed House-Surgeon to the Worcester General Infirmary.

STOCKER, CHARLES J., L.R.C.P.Lond., M.R.C.S., L.S.A.Lond., has been appointed Honorary Visiting Surgeon to the West Ham and South Essex Dispensary, vice Ryley, resigned.

STUART, T. P. ANDERSON, M.B., has been appointed Assistant to the Professor of the Institutes of Medicine, and Senior Demonstrator of Practical Physiology in the University of Edinburgh.

SWEETING, M. CASS, M.R.C.S., has been appointed Medical Officer to the Workhouse of the Knaresborough Union.

THOMAS, W. E., L.R.C.P.E. &c., has been appointed Resident Medical Officer to the Metropolitan Dispensary, St. John's-place, Notting-hill, W.

WALTERS, ST. D. G., M.R.C.S., has been appointed Assistant Medical Officer at the Workhouse, Liverpool Parish, vice Hanley, resigned.

WATSON, A. MARCHMONT, M.D.Ed., M.R.C.S., has been reappointed Medical Officer of Health for the Penistone and Silkstone Rural Sanitary District.

WILEY, A. ORMSBY, L.R.C.P.Ed., L.R.C.S.I., has been appointed Medical Officer for the Scriven District of the Knaresborough Union.

Births, Marriages, and Deaths.

BIRTHS.

CROWDY.—On the 22nd ult., at Highgate, the wife of Frederic Hamilton Crowdy, M.B., of a daughter.

FLINT.—On the 29th ult., at Westgate-on-Sea, in the Isle of Thanet, the wife of Arthur Flint, L.R.C.P.Lond., M.R.C.S.E., of a son.

HUTCHINGS.—On the 26th ult., at Southborough, Tunbridge Wells, the wife of Edward J. Hutchings, M.R.C.S.E., of a son.

SAUNDERS.—On the 30th Sept., at Cape Town, the wife of Henry W. Saunders, M.B., F.R.C.S., of a son.

WEBB.—On the 23rd ult., at Kingsbridge, South Devon, the wife of W. H. Webb, M.R.C.S., of a daughter.

MARRIAGES.

ATKINSON—THOMAS.—On the 27th ult., at St. Mary Abbott's, Kensington, Frederic William, son of the late Mr. William B. Atkinson, M.R.C.S., to Emily Margaret, daughter of Mr. Lake Thomas, of Dawson-place, Bayswater.

CLIFTON—READ.—On the 28th ult., at Edgbaston, Birmingham, by the Rev. Arthur Mursell, Arthur C. Clifton, M.R.C.S.E., to Emma, daughter of the late John Mabyn Read, of Helston, Cornwall. No cards.

FULLER—BIRKETT.—On the 25th ult., at the Parish Church, Ramsgate, Thomas Warberton Fuller, M.B.Lond., son of Dr. Fuller, of New Shoreham, to Florence, eldest and only surviving daughter of the late George Birkett, M.D., of Northumberland House, Stoke Newington.

GRIFFITH—FOOTE.—On the 28th Sept., at St. Peter's Church, Antigua, Robert Pole Griffith, M.R.C.S., to Catherine, eldest daughter of the Hon. Thos. D. Foote.

OLIVER—JENKINS.—On the 27th ult., at Christ Church, Consett, Thomas Oliver, M.D., of Newcastle-on-Tyne, to Edith Rosina, eldest daughter of William Jenkins, J.P., of Consett Hall, County Durham.

DEATHS.

EDIS.—On the 10th ult., at Santa Barbara, California, Frederick Pooley Edis, F.R.C.S., Surgeon-Major in Her Majesty's Indian Army (third son of the late Robert Edis, of Huntingdon), in his 39th year.

FOULIS.—On the 31st ult., of diphtheria, at 191, Hill-street, Glasgow, David Foulis, M.D., Pathologist and Lecturer on Pathology, Glasgow Royal Infirmary, aged 35.

FOWLER.—On the 30th ult., at Marland-place, Southampton, Robert Strange Fowler, M.R.C.S., aged 77.

GARNEYS.—On the 21st ult., at Repton, William Garneys, Surgeon, aged 40.

GEOGHEGAN.—On the 27th ult., at Milton, near Portsmouth, Edward George Geoghegan, Assistant Medical Officer of the Borough Lunatic Asylum, youngest son of the late Dr. T. G. Geoghegan, of Dublin.

HAYDEN.—On the 30th ult., at Merrion-square, Dublin, Thomas Hayden, F.K.Q.C.P.I., M.R.I.A.

MACDOUGALL.—On the 30th ult., at Jordan-lane, Morningside, Edinburgh, Alexander MacDougall, L.R.C.S.Ed., and formerly Treasurer of the Royal Infirmary, Edinburgh, in his 78th year.

MACKERTICH.—On the 27th ult., at Fitzroy-square, Surgeon-Major S. Mackertich, M.D., 5th Punjab Infantry, aged 44.

OLIVER.—On the 6th ult., of yellow fever, at Gun Hill, Barbados, John Richard Oliver, Surgeon, Army Medical Department, youngest son of William Clarke Oliver and Ellen Harnett Knockbrack, of Abbeyfeale, Ireland.

RANDALL.—On the 30th ult., at the residence of his father, John Randall, M.D., of Nottingham-place, W., Surgeon-Major J. G. Randall, of Woolwich, aged 36.

SOLEY.—On the 20th ult., at Windsor, T. Ap Preece Soley, M.R.C.S., L.S.A.Lond., aged 85.

N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Nov. 3rd, 1881.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radia in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 28	30·19	N.E.	44	40	..	48	40	..	Cloudy
„ 29	30·11	N.E.	39	37	..	46	37	..	Overcast
„ 30	30·21	N.E.	37	35	..	45	35	..	Hazy
„ 31	30·23	N.E.	34	33	..	42	33	..	Foggy
Nov. 1	29·86	S.E.	35	33	..	40	30	..	Overcast
„ 2	29·86	S.E.	40	38	..	45	32	·03	Overcast
„ 3	29·76	S.E.	40	39	..	48	36	·06	Overcast

Medical Diary for the ensuing Week.

Monday, Nov. 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations 10½ A.M. each day, and at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.

MEDICAL SOCIETY OF LONDON.—8.30 P.M. General Meeting, after which the Ordinary Meeting will take place.—The President will exhibit a Case of Disease in the Floor of the Fourth Ventricle.—Dr. Allchin will exhibit a Specimen of Renal Disease showing Pyelitis with Calculi. Dr. Drysdale, "On the Origin of Vaccinia and its bearing on Animal Vaccination."

Tuesday, Nov. 8.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 3 P.M.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8.30 P.M. Mr. John H. Morgan, "On Two Cases of Congenital 'Macrostoma,' accompanied by Malformation of Auricles and the presence of Auricular Appendages."—Mr. H. Langley Browne, "On Simultaneous Ligature of the Subclavian and Carotid Arteries for Innominate Aneurism."

Wednesday, Nov. 9.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.

ST. THOMAS'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.

ST. MARY'S HOSPITAL.—Operations, 1½ P.M.

KING'S COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at 1 P.M.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.

UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.—Skin Department.—1.45 P.M., and on Saturday at 9.15 A.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Operations 2½ P.M.

HUNTERIAN SOCIETY.—7.30 P.M. Council Meeting.—8 P.M. Dr. Robert Barnes, "On Antiseptic Midwifery and Septicæmia in Midwifery."

ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. B. Wills Richardson, "On Multiple Staining of Animal and Vegetable Tissues."

Thursday, Nov. 10.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 2 P.M., and on Friday at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2½ P.M.

ABERNETHIAN SOCIETY (St. Bartholomew's Hospital).—Mr. Womack, "On Renal Secretion."

Friday, Nov. 11.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Golding Bird, "On Cases of Gastrostomy."—Adjourned Discussion on Mr. Reeves' Paper upon Two Cases of Malignant Stricture, in which Gastrostomy was performed.—Mr. Clement Lucas, "On a Case in which a Pebble was Removed by Tracheotomy from the Right Bronchus."—Dr. Mahomed and Mr. Cripps, "On Two Cases of Direct Transfusion of Blood for Hæmorrhage in Typhoid Fever."

Saturday, Nov. 12.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Local papers containing reports or news-paragraphs should be marked.

We cannot prescribe, or recommend practitioners.

Lectures, original articles, and reports should be written on one side only of the paper.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

FROZEN MEAT AND FISH.

THERE can be no longer any doubt as to the possibility of bringing supplies of meat and fish to this country in a frozen state and landing them in a condition fit for food. It is much to be regretted that our reliance on external sources of supply for the needs of the population increases so rapidly as it does. It is impossible to avoid the feeling that, in respect to fish at least, we are throwing away the supplies nature offers us in the most freehanded fashion, and at the same time taking infinite pains to procure precisely the same things elsewhere. The price of butcher's meat is scandalously high, but it is kept above the true commercial level for the benefit of a trade which flourishes apace. If the fish taken, or which it would be easy to take, off these islands, were quickly landed and properly sold, not only would this particular article of food be placed within the reach of the poor, but the competition with butcher's meat would be so great that the prices of the latter article must at once be reduced. By such measures as Parliament and the Metropolitan Board of Works could readily institute, within the next six months the average price of fish of the ordinary sorts would be reduced to fivepence a pound retail, and meat would then again fall to eightpence or ninepence. The "policy" which should bring about these results would be a policy of health.

Dr. Sivns.—J. Edmunds, 31, Stamford-street, London, S.E.

H. M. (St. Bartholomew's).—The primary examination commences this day (Friday).

WATERCLOSET ACCOMMODATION IN HOSPITAL WARDS.

To the Editor of THE LANCET.

SIR,—I will thank you or any of your readers for information as to the best provision for meeting the wants of hospital wards at night in regard to watercloset accommodation. It is too far for many patients to walk out to a corridor. How could a closet be best supplied on the spot Night-chairs of the old type are out of the question, as they contaminate the wards too much. Is there any cheap and odourless removable closet? or can a w.c. be procured to be inserted in the boundary wall free from all contaminating influence? I know such are promised, but I should like to hear of the promises being realised.

I am, Sir, yours, &c.,

Cashel, Oct. 27th, 1881. T. LAFFAN.

CO-OPERATION WITH UNQUALIFIED PERSONS.

To the Editor of THE LANCET.

SIR,—I must apologise for troubling you with the following, but as I consider the dignity of the profession to be seriously compromised, I think it only right to ask your opinion.

A certain member of the medical profession residing in this district sees patients with an unqualified individual under the following circumstances. The unqualified man has been in practice in a neighbouring town for many years. This man, I am given to understand, comes down here on certain days and sees patients, prescribing, &c., in the qualified man's surgery. Now, is this compatible with the dignity of the profession in general or the interests of the profession in particular in this district, and have we no redress in a case of this sort? A one-portal system for admitting and a fair censorship of the doings of the members of the profession would surely wipe away any abuses of this kind. Do you think that a medical man, cognisant of the foregoing, should meet the surgeon in question in consultation? Personally I have refused to do so.—I remain, Sir, yours faithfully,

Oct. 22nd, 1881. ALPHA.

*** The statements of our correspondent are astounding. Supposing the accuracy of them to be ascertained, there can be no doubt of the propriety of all medical men declining to meet a practitioner who so misunderstands his duty to the public and the profession.—ED. L.

TREATMENT OF POPLITEAL ANEURISM.

DR. F. HEUSTIS, of Mobile, U.S.A., describes in *Gaillard's Medical Journal* a case of popliteal aneurism, in which, after failure of Esmarch's bandage and forced flexion, he had recourse successfully to the following procedure:—He took a block of wood, three inches square and three-quarters of an inch thick, with a depression in its centre for holding firmly a nearly solid india-rubber ball, of about two inches diameter, screwed on to it, and applying the ball over the femoral artery just below the groin, put a heavy bag of shot upon the block. A strong cord was tied around the bag close above the shot to make them more compact and prevent the bag from settling down. It answered, says Dr. Heustis, admirably. The pressure was borne with much more comfort than any previously tried, and could easily be kept up continuously for an hour before it became necessary to shift the position of the ball. Besides, it gave the man occupation. The next day the pulsation did not appear to be quite so expansive. Pressure, however, was continued, and removed at night. There was little change next morning, but in the evening the patient announced that the "beating" had ceased. A solid tumour remained, which gradually grew smaller, and the man soon resumed work as well as ever.

Anxiety.—The Medical Act provides that "if any registered medical practitioner shall be convicted in England or Ireland of any felony or misdemeanor, or in Scotland of any crime or offence, or shall after due inquiry be judged by the General Council to have been guilty of infamous conduct in any professional respect, the General Council may, if they see fit, direct the registrar to erase the name of such medical practitioner from the Register." Any application for the removal of a name from the Register is investigated in the first instance by the Branch Council of that part of the kingdom in which the person whose name is proposed to be removed resides, and a statement of the case, and of the evidence in support of it, are then sent up by such Branch Council to the registrar of the General Council. The registrar, if so directed, then summons the person against whom the proceedings have been instituted to attend the General Council. Our correspondent should consult a solicitor.

Irelandus.—The secretary of the university is J. C. Meredith, Esq., 35, Upper Merrion-street, Dublin.

RETENTION OF THE PLACENTA.

To the Editor of THE LANCET.

SIR,—Dr. W. Nicholson, in your issue of July 16th, 1881, records what he terms a "remarkable case of retention of the placenta," one of the most interesting features in the case being that it retained its vitality until its expulsion, twenty-two days afterwards. Mr. B. Walker, in your issue of the 15th instant, suggests that the retention was due to spasm of the neck of the uterus, which might have been relieved by repeated doses of hyoscyamine. The opinion given by Dr. Nicholson—viz., "I think there can be little doubt that in this case there must have been inflammatory adhesion of the entire placenta to the uterus," seems more in accordance with the experience usually gained in similar cases, for in a large number of them it will be found that as long as the placenta is not thrown off the cervix remains sufficiently patulous to enable the finger to be passed within the uterus. There may be, it is true, some spasmodic closure of the os uteri just at the time the fœtal portion of the ovum is expelled from the uterus, preventing the placenta being extruded, but this spasmodic condition seldom lasts long. The accompanying case seems worthy to be placed on record:—

Retention of the Placenta for fourteen weeks, following a Miscarriage.

Mrs. T——, aged thirty-nine, married nineteen years, mother of twelve children, besides having had several miscarriages. She became again pregnant in the spring of 1881. Towards the end of June, without any well-marked assignable cause, she miscarried at the time when she considered herself between the fourth and fifth month of pregnancy. A nurse who attended her thought everything had come away. All traces of hæmorrhage ceased at about the end of a fortnight, but in a month from this date she had a profuse loss of blood per vaginam, and the discharge of blood continued on and off for another two months. In the evening of Oct. 6th I was requested to see the patient in consultation, as the hæmorrhage had returned more violently, large clots being from time to time passed. On examination the uterus was found to be much above the normal size, the os patulous, readily admitting the finger, which detected a mass of moderately firm consistence, adherent to the fundus, smooth and somewhat lobulated on the surface, evidently from its feel, and its extensive base of attachment, placental. But little difficulty was experienced in passing in two fingers within the cervix. The mass was gradually peeled away, commencing at the circumference. It was then extracted piecemeal by the aid of ovum forceps, as it was too large to pass through the os uteri. There must have been at least three ounces by weight, probably the whole of the placenta. It was not the least offensive to the smell, nor did it bear the slightest trace of decomposition. The uterus was subsequently washed out with hot water, ergot and opium administered, and a pad and binder applied.

I am, Sir, yours faithfully,

Wimpole-street, W., Oct. 24th, 1881. ARTHUR W. EDIS, M.D.

MEDICAL ATTENDANCE ON PILGRIMS ON BOARD SHIP.

IN the City of London Court last week, before Mr. Commissioner Kerr, the case of Confield *v.* Jones, Price, and Co. was tried. It was an action by a medical officer on board one of the defendant's vessels, which was engaged to call at Jedda on its way to Mecca with pilgrims. The agreement was in writing, and under it he contended that he was entitled to be paid so much per head for all he attended on board. The contention on the part of the defendants was that he was only to be paid "head money" upon the pilgrims. Plaintiff had received £79, and now claimed a considerable balance. The agreement was produced, and it specified that "head-money" on the "total number of pilgrims was to be charged if they did not exceed 100."—Mr. Jones (Lawless, Nelson, and Jones) said the plaintiff endeavoured to charge head-money on a number of coolies who were only on board a few hours on special duty.—The plaintiff replied that the coolies were on board two weeks at Marseilles, as the ship was in quarantine.—His Honour said they were not pilgrims.—The plaintiff thought he was entitled to head-money for all on whom he attended, as he was under ship's articles, and was requested to attend on coolies and passengers by the captain in addition to the pilgrims.—His Honour said the agreement was specific, and he must find for the defendants. The plaintiff's only claim could be against the captain.

S. W. complains of the multiplication of cheap dispensaries where no inquiry is made as to the earnings of the applicants. The evil is a real one. What is wanted is the suggestion of remedies.

Rev. G. H. Drewe must refer to our advertising columns.

Mr. M'Dowell.—The paragraph is unsuited to our columns.

Verus.—We must decline to give the gentleman further publicity.

MEDICAL OFFICERS OF HEALTH AND MEDICAL ETIQUETTE

To the Editor of THE LANCET.

SIR,—A and B are private practitioners, and B also holds the appointment of medical officer of health. A, of his own accord, gives the addresses of several of his patients who are suffering from enteric fever. B calls upon them with the inspector of nuisances, and, in addition to making the usual inquiries about milk-supply, &c., makes an examination of each patient, and in more than one instance of his medicine also. In so doing B maintains that he follows the instruction laid down for him as medical officer of health. A denies his right to examine the patient, or to do anything else than see to the general hygienic condition of the house. Your expression of opinion upon this matter will oblige.

I am, Sir, yours faithfully,

Nov. 1st, 1881. ENQUIRENS.

*** We consider B's conduct entirely uncalled for and unjustifiable. The law does not contemplate a medical officer of health sitting in judgment on the diagnosis and treatment of a medical practitioner.—ED. L.

India will find suggestions on the treatment of chilblains in THE LANCET, vol. I., 1875, pp. 56, 74, 110.

Anxious should consult a qualified medical man.

Mrs. E. Emes.—The medical attendant should be consulted.

T. H.—Yes.

Medicus.—Bristowe's Theory and Practice of Medicine, which contains (in last edition) an article on Insanity.

AN APPEAL.

To the Editor of THE LANCET.

SIR,—Allow me, through your columns, to appeal to the profession on behalf of Isabel Dalzell, aged fourteen, the orphan child of the late Dr. Dalzell, who practised in Notting-hill. He was insured in an unsound company, and left a widow with little means and this child. The widow made a second and most disastrous marriage, by which she has two children. She has to work hard for them, and they are being educated at a Board school. My friend, Mr. Martin, of Sellyoak, Birmingham, has gone into the case thoroughly, and he writes that he has "never heard a more pitiable tale." Dr. Russell, of Birmingham, joins us in this appeal. We wish to procure Isabel Dalzell a good education, that she may qualify as a governess, and thus be able to help her mother. I have already to thank several gentlemen who have given donations, one being a Plymouth layman. Dr. Russell, Newhall-street, Birmingham, and Mr. Theo. Martin, of Sellyoak, Birmingham, will also be glad to receive donations. Appended is a list:—

Dr. Hingston, Plymouth	£2	2	0
Lewis Lewis, Plymouth	2	2	0
Theo. Martin, Esq., Sellyoak	1	1	0
John Windeatt, Esq., Plymouth	0	10	0
Dr. Shingleton Smith, Clifton	0	10	0
R. Paramore, Esq., Hunter-street, W.C. ..	0	10	0
F. Hollinshead, Esq., Sellyoak	0	10	0

I am, Sir, yours faithfully,

St. Michael's-terrace, Plymouth, Nov. 1st, 1881. LEWIS LEWIS.

A Surprised Father.—The fee is understood to cover the charges for accouchement and the ordinary attendance afterwards. If this attendance is unusually prolonged, or the visits are unusually multiplied, then an extra charge would be reasonable.

An Aggrieved Surgeon.—Our correspondent should write a short, clear statement of the facts to the coroner and complain. We think he was badly treated.

BROUGHAM CABS.

To the Editor of THE LANCET.

SIR,—Will any medical man in country practice give me his opinion of the two-wheel brougham cabs by Marston or Bramsby for country journeys. I am, Sir, yours, &c.,

Oct. 26th, 1881. A COUNTRY DOCTOR.

DISTRICT MEDICAL OFFICERS AS MEDICAL OFFICERS OF HEALTH.

To the Editor of THE LANCET.

SIR,—I have often read and heard remarks upon the ineligibility or inferiority of the district medical officer as medical officer also for the sanitary authority, in rural districts more particularly, but no valid reasons for such remarks have ever been satisfactory to my mind. Nor can I apprehend for similar reasons why any duly qualified medical man in actual practice should not be able to perform the duty of urban medical officer in towns to the satisfaction of the community and the best interests of the State.

The subject is still kept before the eyes of the profession, travestied now and again from head-quarters, and again echoed from the editorial chair to complete the ostracism, yet I believe there are at the present time men of equal capacity performing good work and many able to do and compare with the present race of health officers. What professional difference is there? The status of each is practically the same. I grant some have made a special study of State medicine, but how many have not. Everyone must be in possession of a diploma for either service. Many attempts have been made to isolate State medicine in both urban and rural districts, but, so far as I have observed, it has proved a great failure. In my own locality the former *régime* has been utterly routed, and the health officer of towns now practises his profession as of yore. Sheffield to wit—what could be acting better than the present order of things? I know it has fallen in the estimation of the Local Board and envious detractors, and the salary is shorn of its State fringe; but, nevertheless, there it stands out boldly doing good work, with excellent results. The *bête noire* of our profession is its love of specialisation and creation of departments in medicine. A poor student nowadays is bewildered with the magnitude of its offshoots, and where to pick up the scattered emblems of knowledge is the puzzle of paterfamilias. As a Poor-law surgeon of some years, in a large population both rural and urban, and of some experience also in State medicine, I cannot divest my mind of a seemingly tacit, slight, and unsatisfactory belief of capacity fostered and allowed to be passed upon a large and influential, hard-worked, little paid body of gentlemen emanating largely from Local Government officials and gentlemen who have given themselves over exclusively to the practice of State medicine, and who hope to specialise this branch for themselves. As far as my knowledge goes, "Poor-law officers" were the forerunners of health officers, and they have done much work, and do it now broadly, and have borne the burden. They are the common witnesses of the contagium carriers of towns and villages, and they are gathering important information constantly on their rounds, and that information is of the most vital importance, not only to the community, but the State. What is their reward? The very information they gather from day to day at pauper's price is filched from their report-books by the health officer, and the Local Government pay them for the depredation. When will "Local Government Boards" do justice to the "Poor-law surgeon?"—I am, Sir, yours, &c.,

Oct. 12th, 1881. A POOR-LAW SURGEON.

PRESCRIPTION OF POISONS THROUGH NEWSPAPERS.

IN the *English Mechanic*, of all places in the world, we see a physician prescribing for a patient arsenic. We are amazed at the proceeding, and call on the physician and the editor alike to consider whether this is either a safe, a wise, or a dignified proceeding.

ERRATUM.—It is Dr. J. W. Moore, and not Charles F. Moore, who is Scandinavian Secretary to the Epidemiological Society, London.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Professor Annandale, Edinburgh; Professor Struthers, Aberdeen; Dr. Niven, Ontario; Dr. Mapother, Dublin; Dr. Irwin, Manchester; Dr. Dyer, Ringwood; Mr. Coates, Hucknall-Torkard; Dr. Skene, Dewsbury; Mr. C. E. Jennings, London; Dr. Lownds, Egham; Mr. W. Reeves, London; Mr. W. Soper, London; Dr. Edw. Seaton, Nottingham; Mr. Henry Smith, London; Mr. Cullimore; Dr. A. M. Watson, Penistone; Rev. G. H. Drawe, Michigan; Dr. Harbinson, Lancaster; Mr. H. L. Jones, London; Dr. Reichert; Mr. D. A. King, London; Dr. Gulliver, London; Mr. Baker, London; Mr. Crookshank, London; Mr. Barrett, London; Dr. Osio, Madrid; Mr. Lewis Lewis, Plymouth; Mr. Palmer, East Sheen; Mr. M'Dowell, London; Captain Hobson, London; Dr. Dyce Duckworth, London; Dr. Brittan, Gwynfryn; Dr. Bristowe, London; Dr. Joseph Rogers, London; Mr. Wolferston; Mr. W. R. Kynsey, Ceylon; Mr. Hyrons, Dudley; Mr. Chas. Donkin, Liverpool; Mrs. E. Emes; Mr. T. Laffan, Cashel; Dr. Lowe, Lynn; Dr. Fisher, Chelsea; Mr. Parker, Bath; Dr. Blake, London; Dr. B. O'Connor; Mr. Day, Leicester; Messrs. Harrison and Brass, Elgin; Mr. Huggins, Malvern; Mr. Pike; Messrs. Oliver and Boyd, Edinburgh; Messrs. Wood and Co., New York; Messrs. Davis and Hutchinson; Mr. Woodison; Mr. Knight, Birmingham; Miss Austin, Brixton; Messrs. Smith and Son, Manchester; Mr. King, Leeds Mr. Pearson, Broomhill; Dr. Hope, London; Mr. N. Matthews, London; Mr. J. B. Scriven, London; Senex; S. W.; Hamish; Epsilon; Veritas; India; Hollin's Cross; S. P. Q. R.; Medicus; H. J.; An Aggrieved Surgeon; Verus; &c., &c.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Winder; Mr. Shirtcliffe, Kingston-on-Thames; Mr. Hodgkins; Mr. Redmayne, Newcastle-on-Tyne; Mr. L. Tait, Birmingham; Mr. Cornish, Manchester; Mr. Atkinson, Halifax; Messrs. Knight and Co., Rotherham; Mr. Smyth, Preston; Dr. Hitch, Eastbourne; Mr. White, London; Mr. Eaton, Breadsall; Mr. Ecnau, Market-Bosworth; Mr. Cairns; Mr. Hall, Old Kent-road; Dr. March, Rochdale; Messrs. Macmillan and Co., Cambridge; Mr. Baldwin, Leicester; Mr. Giles, Edinburgh; Mr. Maclehose, Glasgow; Dr. Finch, Salisbury; Dr. Frain, South Shields; Mr. Nicolay, Newcastle; Dr. M'Kane; Dr. Risk; Mr. Holt, Helmshore; Mr. Wheeler, Birmingham; Mr. Clarke, Huddersfield; Mr. George, Liverpool; Mr. Beman; Mr. R. Carshall; Messrs. Deeks and Co.; Dr. Buck, Settle; Mr. Saunders, London; Mr. Burgess; Mr. Seymour; K. G., Manchester; Medicus, Cannington; J. B. R.; R. C. H., Oldham; Principal, Seaforth; X. Y., Manchester; Vega; R. M. K., Armagh; C. T. K., Exmouth; Medicus, Kilwinning; P. J. F.; Medicus, Winforten; J. B. H., Chatham; A. H., Charing-cross; J. C., Blackheath; C. C., New-cross; Medicus, Reigate; Medicus, Derby; L. E. M., Mile-end; Rye-lane; F.R.S.; Royal College of Physicians, London; A. B., Aberavon; A. B.; Medicus, Cambridge; Medicus, Glasgow; Alpha, Huddersfield; M. B., Blandford; J. H. S., Cardiff; E. D. S., Bishop Auckland; Manchester; Zinc, Leicester; F. C. B., Bridlington; &c., &c.

El Observador Medico, Nottingham and Midland Counties Daily Express, Coffee Public-house News, Zoophilist, Food and Health, Birkenhead and Cheshire Advertiser, Musical Education, Temperance Record, &c., have been received.

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